DOCUMENT RESUME

ED 265 898 JC 860 068

TITLE Alaska Postsecondary Education, 1986-1990: A Statewide Plan. Volume I.
INSTITUTION Alaska State Commission on Postsecondary Education, Juneau.
PUB DATE Dec 85
NOTE 177p.; For Volume II of this report, see JC 860 069. For a "Draft for Public Comment," see ED 258 645-46.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS Access to Education; Accountability; Community Colleges; Cost Effectiveness; *Educational Objectives; Educational Quality; Futures (of Society); *Long Range Planning; Nontraditional Students; *Postsecondary Education; Program Effectiveness; Remedial Programs; Rural Education; School Holding Power; State Universities; *Statewide Planning; Teacher Education; Vocational Education
IDENTIFIERS *Alaska

ABSTRACT

Designed to provide direction for postsecondary education in Alaska for the next 5 years, this statewide plan analyzes the present status of postsecondary education in the state and offers goals and strategies for the future. Following an executive summary of goals and strategies, the report presents an introduction to the growth of postsecondary education in the state, the dilemma of declining revenues, the planning process, the goals of the statewide plan, and the report. Chapter I explains the assumptions about the future planning period from 1986 to 1990. Chapter II describes the current state of postsecondary education in the state. Chapter III provides a broad overview of the problems and issues facing American postsecondary education. Chapter IV contains a brief overview and explanation of each goal of the statewide plan: (1) promote excellence to improve educational service; (2) enhance accountability of the educational process; (3) foster efficiency within the educational enterprise; and (4) improve access to accommodate those citizens who desire postsecondary education. Finally, chapter V presents a series of strategies, with accompanying discussion, grouped according to the goal with which each strategy is associated. A six-page bibliography is included. (EJV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ALASKA POSTSECONDARY EDUCATION

1986-1990

ED265898

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M. SWANSON

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

VOLUME I

A STATEWIDE PLAN

JC 860 068

ALASKA COMMISSION ON POSTSECONDARY EDUCATION
DECEMBER, 1985

ALASKA POSTSECONDARY EDUCATION

1986-1990

VOLUME I

A STATEWIDE PLAN

Alaska Commission on Postsecondary Education
400 Willoughby Avenue, Pouch FP
Juneau, AK 99811

Document No. 86-4

ALASKA COMMISSION ON POSTSECONDARY EDUCATION

Ms. Barbara Shaffer, Chair
Ms. Patricia Abney
Ms. Ruth Burnett
Ms. Patricia Clark
Mr. Gordon Evans
Ms. Ernestine Griffin
Mr. John Havelock
Mr. Richard Helms
Senator Jalmar Kerttula
Representative Niilo Koponen
Ms. Bettye Smith
Ms. Barbara Thompson

COMMISSION OFFICE

Dr. Kerry D. Romesburg
Executive Director
Alaska Commission on Postsecondary Education
Pouch FP, 400 Willoughby Avenue
Juneau, Alaska 99811

(907) 465-2854

ACKNOWLEDGEMENTS

The strategies and recommendations contained in this document resulted from the contributions of a large number of very knowledgeable people. The Advisory Committee to the Commission was especially instrumental in the development and refinement of the recommendations. Also, several people associated with the University of Alaska furnished invaluable suggestions which served to render the plan more realistic and provided guidance so that it would be in concert with the fundamental concerns of the University. The University of Alaska Office of Institutional Studies was particularly helpful in supplying a great deal of information which helped to form the basis from which the strategies were developed. Finally, a host of other interested and perceptive citizens made suggestions which helped make the plan truly a statewide endeavor. The Commission owes each person a debt of gratitude and extends a warm thank you to all who participated.

TABLE OF CONTENTS

	PAGE
Executive Summary	i
Introduction	1
Chapter I. Assumptions about the Future	8
Chapter II. The Present State of Postsecondary Education in Alaska 1985.	11
Chapter III. Problems and Issues in Higher Education	17
Chapter IV. The Goals of the Statewide Plan	78
Chapter V. Strategies.	83
GOAL: PROMOTE EXCELLENCE to improve educational service . . .	84
GOAL: ENHANCE ACCOUNTABILITY of the educational process . . .	97
GOAL: FOSTER EFFICIENCY within the educational enterprise . .	107
GOAL: IMPROVE ACCESS to accommodate those citizens who desire postsecondary education	130

LIST OF FIGURES

FIGURE		PAGE
1	Unrestricted Revenues FY77 - FY87	2
2	University of Alaska System	12
3	UAF Student Retention	88
4	UAA Student Retention	88
5	UAJ Student Retention	89
6	Percentage of Bachelor Degrees Awarded by Institution 1982-84	118
7	Percentage of Master Degrees Awarded by Institution 1982-84	119

LIST OF TABLES

TABLE		PAGE
1	Standards for the Generation of Student Credit Hours per FTE Faculty	99
2	Student/Faculty Ratio Guidelines for the Allocation of FTE Faculty	100
3	Duplicate Masters Degree Programs	122
4	Percentage Contribution to the Local Community College Budget Using .5 Mill Assessment of 1984 Full Value Determination of Local Property	139
5	Mill Rates on Full Value Determination of Local Property Needed to Fund 10, 20, and 30 Percent of the Local FY84 Community College Budget	140
6	Participation Rates of First-Time Resident Enrollment in Public Institutions Per 1000 Population 1978	144

EXECUTIVE SUMMARY

This is the first Statewide Plan for postsecondary education in Alaska. It is the result of a substantial amount of participation by a wide variety of Alaskan citizens. This report provides direction for the postsecondary education community for the next five years. To ensure that this document remains current and addresses the educational needs of the citizens of Alaska, the Commission will review the plan annually. In this sense, the Statewide Plan is a "living document" which will speak to the ever-changing socioeconomic environment which affects, and is affected by, postsecondary education.

Many of the problems and issues which are identified in this plan are also being faced in other parts of the nation. To provide a background from which the reader can relate those issues in Alaska to a broader context, a brief overview of those problems and issues which are being addressed by the higher educational community in the United States is provided in Chapter III.

This plan is a statement of advocacy for postsecondary education. This support is reflected in the four goals toward which the plan is directed. As discussed in Chapter IV, the planning goals for postsecondary education in Alaska are to:

- PROMOTE EXCELLENCE to improve educational service;
- ENHANCE ACCOUNTABILITY of the educational process;

- FOSTER EFFICIENCY within the educational enterprise; and
- IMPROVE ACCESS to accommodate those citizens who desire postsecondary education.

The following strategies (explained in Chapter V) are grouped according to the goal each promotes. It should be noted that some of the strategies contribute to more than one goal. For convenience, however, the strategies are associated with the goal with which each has the strongest relationship.

GOAL: PROMOTE EXCELLENCE to improve educational service.

STRATEGY 1. THE UNIVERSITIES AND COLLEGES ARE URGED TO DEVELOP ASSESSMENT PROGRAMS TO MEASURE THE IMPACT OF THEIR CURRICULUM AND INSTRUCTION ON STUDENT LEARNING.

STRATEGY 2. THE COMMISSION ENCOURAGES THE UNIVERSITY OF ALASKA AND OTHER INSTITUTIONS TO STUDY FURTHER THE RETENTION AND PROGRESSION PATTERNS OF THE ENTERING FULL-TIME STUDENTS.

STRATEGY 3. THE RECENTLY ESTABLISHED ALASKA PRIVATE SCHOOL ASSOCIATION, INC. IS ENCOURAGED TO STRENGTHEN ITS MEMBERSHIP AND TO ADDRESS THE QUALITY OF THE PROPRIETARY EDUCATIONAL PROCESS.

STRATEGY 4. THE COLLEGES AND UNIVERSITIES IN THE STATE ARE ENCOURAGED TO CONTINUE COURSES, PROGRAMS, AND ACTIVITIES WHICH SERVE TO ENHANCE THE AWARENESS AND RESPECT OF ALL CULTURES.

GOAL: ENHANCE ACCOUNTABILITY of the educational process.

STRATEGY 5. THE UNIVERSITY OF ALASKA SHOULD DEVELOP GUIDELINES FOR THE ADDITION OF FACULTY AND STAFF AND USE THESE GUIDELINES IN ITS BUDGET REQUEST TO THE LEGISLATURE AND THE GOVERNOR, AND ARE CONSISTENT WITH THE STRATEGIES OF THIS PLAN.

STRATEGY 6. THE COMMISSION IS IN STRONG AGREEMENT WITH THE REPORT SUBMITTED TO THE ALASKA STATE LEGISLATURE FROM THE RURAL EDUCATION TASK FORCE AND ENCOURAGES THE UNIVERSITY TO TAKE IMMEDIATE ACTION IN DEVELOPING A COMPREHENSIVE PLAN FOR POSTSECONDARY EDUCATION SERVICES FOR RURAL/NATIVE ALASKANS.

STRATEGY 7. WITH ATTENTION TO THE MISSION OF EACH OF THE UNIVERSITY CENTERS, AND OTHER STRATEGIES WITHIN THIS PLAN, THE UNIVERSITY OF ALASKA SHOULD CONTINUE TO ASSESS THE RELATIONSHIP OF RESEARCH TO INSTRUCTION AND PUBLIC SERVICE.

GOAL: FOSTER EFFICIENCY within the educational enterprise.

STRATEGY 8. THE UNIVERSITY OF ALASKA SHOULD INSTITUTE A COMMON COURSE NUMBERING SYSTEM TO FACILITATE THE AUTOMATIC TRANSFER OF CREDITS FOR EQUIVALENT COURSES AMONG THE UNITS AND, IN PARTICULAR, BETWEEN THE COMMUNITY COLLEGES AND THE FOUR-YEAR INSTITUTIONS.

STRATEGY 9. IN LIGHT OF DECLINING STATE REVENUES, THE SUMMER SESSION PROGRAMS AT THE UNIVERSITY OF ALASKA CAMPUSES SHOULD BE ADMINISTERED

SO THAT DIRECT TEACHING COSTS ARE NOT EXCESSIVE RELATIVE TO REVENUES.

STRATEGY 10. IN ORDER TO ACCOMMODATE STUDENTS WHO ARE UNDERPREPARED FOR COLLEGE LEVEL WORK, THE CAMPUSES OF THE UNIVERSITY OF ALASKA SHOULD INSTITUTE DEVELOPMENTAL PROGRAMS WHICH ADDRESS SPECIFICALLY THE ACADEMIC DEFICIENCIES OF THEIR INCOMING STUDENTS.

STRATEGY 11. AS PART OF ITS ONGOING PROGRAM REVIEW, THE UNIVERSITY OF ALASKA SHOULD CONTINUE TO AVOID UNNECESSARY DUPLICATION OF PROGRAMS AND GIVE SPECIAL ATTENTION TO DECISIONS ON ADDITIONAL PROGRAMS AT THE GRADUATE LEVEL.

STRATEGY 12. THE ADDITION OF NEW FACILITIES FOR THE UNIVERSITY OF ALASKA SHOULD CONTINUE TO BE THE RESULT OF CAREFUL PROGRAM PLANNING AND ONLY AFTER ALL ALTERNATIVES HAVE BEEN EXHAUSTED.

STRATEGY 13. TO IMPROVE THE QUALITY AND EFFICIENCY OF VOCATIONAL EDUCATION DELIVERY, THE DEPARTMENT OF EDUCATION AND THE UNIVERSITY OF ALASKA SHOULD INSTITUTE REGIONAL VOCATIONAL EDUCATION PROGRAMS BETWEEN THE HIGH SCHOOLS AND THE COMMUNITY COLLEGES.

STRATEGY 14. THE STATE SHOULD EXPLORE THE POSSIBILITY OF ENHANCING THE EFFICIENT USE OF EDUCATIONAL FACILITIES BY ENTERING INTO CONTRACTUAL RELATIONS WITH INDEPENDENT COLLEGES AND UNIVERSITIES IN ALASKA AND THEREBY REALIZE COST SAVINGS TO THE STATE.

GOAL: IMPROVE ACCESS to accommodate those citizens who desire postsecondary education.

STRATEGY 15. THE COMMISSION RECOGNIZES AND ENCOURAGES THE EDUCATIONAL CONTRIBUTION OF THE INDEPENDENT INSTITUTIONS OF HIGHER EDUCATION IN ALASKA.

STRATEGY 16. THE UNIVERSITY OF ALASKA, ALASKA'S INDEPENDENT UNIVERSITIES AND COLLEGES, AND ALASKA'S HIGH SCHOOLS SHOULD CONTINUE TO EXPLORE AND EXPAND HIGH SCHOOL ADVANCED PLACEMENT PROGRAMS TO ENHANCE ARTICULATION BETWEEN HIGH SCHOOL AND COLLEGE.

STRATEGY 17. THE UNIVERSITY OF ALASKA AND OTHER INSTITUTIONS SHOULD CONTINUE TO EXPLORE AND IMPLEMENT SCHEDULING ALTERNATIVES THAT IMPROVE ACCESS FOR THE OLDER, PART-TIME STUDENT.

STRATEGY 18. THE STATE AND THE UNIVERSITY SHOULD EXPLORE THE POSSIBILITY OF PARTIALLY FINANCING THE COMMUNITY COLLEGES THROUGH LOCAL TAXING AUTHORITIES.

STRATEGY 19. THE UNIVERSITY OF ALASKA SHOULD BE ENCOURAGED, THROUGH BUDGETARY SUPPORT, TO EXPAND THE TELECOMMUNICATIONS EFFORT TO ENHANCE ACCESSIBILITY AND IMPROVE EDUCATIONAL DELIVERY. THE BUDGETARY SUPPORT SHOULD BE DIRECTED TOWARD INCREASED SUPPORT OF FACULTY DEVELOPMENT AND PRODUCTION OF SOFTWARE FOR TELEVISION AND COMPUTERS.

STRATEGY 20. TO INCREASE THE IN-STATE COLLEGE PARTICIPATION RATE OF HIGH SCHOOL GRADUATES, THE UNIVERSITY OF ALASKA SHOULD EXPAND ITS RECRUITMENT EFFORTS WITH PARTICULAR ATTENTION TO PROVIDING INFORMATION ABOUT THE AVAILABILITY OF IN-STATE INSTRUCTIONAL PROGRAMS.

STRATEGY 21. A STATE SCHOLARSHIP PROGRAM FOR EXCEPTIONAL STUDENTS SHOULD BE ESTABLISHED.

STRATEGY 22. AS A COOPERATIVE EFFORT BETWEEN THE COLLEGES AND UNIVERSITIES AND THE HIGH SCHOOLS IN THE STATE, DIAGNOSTIC TESTS IN MATHEMATICS AND ENGLISH COMPOSITION SHOULD BE ADMINISTERED IN THE JUNIOR YEAR OF HIGH SCHOOL SO THAT APPROPRIATE REMEDIAL COURSES CAN BE OFFERED IN THE SENIOR YEAR OF HIGH SCHOOL, RATHER THAN AT THE COLLEGIATE LEVEL.

STRATEGY 23. THE COMMISSION ENDORSES THE GOVERNOR'S PROPOSED PACIFIC RIM FELLOWSHIP PROGRAM AND ENCOURAGES THE ACTIVE PARTICIPATION OF BOTH PUBLIC AND INDEPENDENT POSTSECONDARY INSTITUTIONS IN ALASKA TO FOSTER SUCH AN EXCHANGE OF STUDENTS BETWEEN PACIFIC RIM COUNTRIES.

STRATEGY 24. THE WICHE STUDENT EXCHANGE PROGRAM, THE WICHE REGIONAL GRADUATE EDUCATION PROGRAM AND THE WAMI MEDICAL EDUCATION PROGRAM SHOULD BE CONTINUED AND EXPANDED WHERE APPROPRIATE TO IMPROVE ACCESS TO GRADUATE AND PROFESSIONAL TRAINING OPPORTUNITIES.

STRATEGY 25. THE ALASKA STUDENT LOAN PROGRAM IS AN EFFECTIVE MEANS TO ELIMINATE FINANCIAL BARRIERS TO POSTSECONDARY EDUCATIONAL AND TRAINING OPPORTUNITIES FOR ALASKANS. IT SHOULD CONTINUE TO PROVIDE ALASKANS OPEN CHOICE AND OPEN ACCESS TO THESE OPPORTUNITIES.

INTRODUCTION

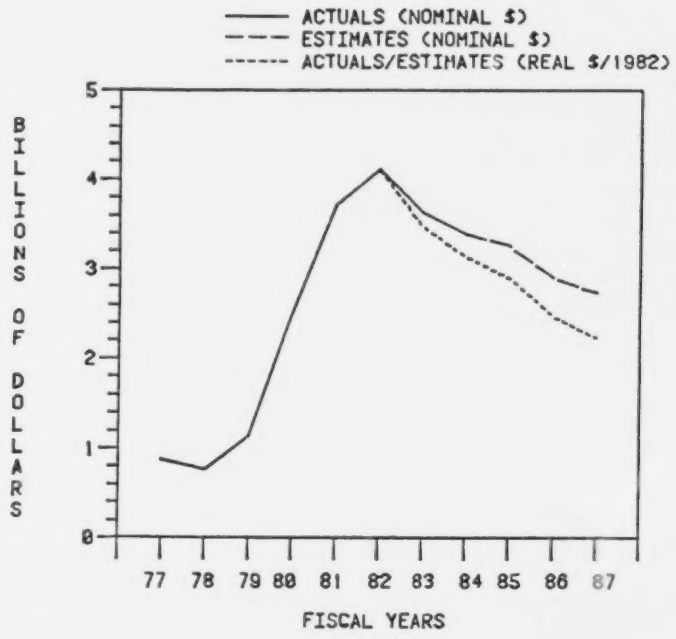
This is the first statewide plan for postsecondary education in Alaska. Although the Commission on Postsecondary Education is required by statute to "develop a comprehensive statewide plan for coordinated postsecondary education in the State" (AS 14.42.030), a plan was not attempted previously because there simply was not enough available information about the postsecondary community in Alaska. This was especially true for the University of Alaska. Remarkable efforts by the University community during recent years, however, have yielded a considerable amount of data about various facets of the postsecondary education enterprise. The enhancement of information, both in quantity and quality, has provided the framework upon which a realistic plan can be produced.

THE GROWTH OF POSTSECONDARY EDUCATION IN ALASKA

It is fortuitous that a plan for postsecondary education has been generated at this point in the history of Alaska. This land of cultural and linguistic diversity has recently enjoyed extraordinary largesse due to oil revenues. Indeed, during the past five years unrestricted general fund revenue has accounted for almost 75 percent of all the revenues collected since statehood. Figure 1 on the following page graphically illustrates this unprecedented phenomenon.

FIGURE 1

Unrestricted Revenues



Source: Alaska Department of Revenue

Publicly supported postsecondary education has shared and benefited from this bounty. For instance, the general fund operating and capital budgets of the University of Alaska have almost doubled during the past five years; the operating budget grew from $88.5 million in FY 1980 to $168.2 million in FY 1985, while the capital budget expanded from $39.8 million to slightly over $73 million. During the same period, student enrollment increased by only 33 percent.

Other segments of the publicly supported postsecondary education community have experienced substantial growth during the recent past. The operating budget of the Alaska Vocational Technical Center at Seward grew from $3 million in FY 1980 to $4.7 million in FY 1985, an increase of 57 percent, while student headcount expanded from 530 to 1,757 during the five-year period - an increase of 208 percent. Additionally, another publicly supported postsecondary vocational-technical center has been established; the Kotzebue Technical Center opened its doors in 1982 and at present enrolls approximately 65 students.

Independent postsecondary institutions have also flourished during recent years. Alaska Pacific University, Sheldon Jackson College and Alaska Bible College, among others, continue to provide alternative postsecondary opportunities to the citizens of Alaska. Moreover, the independent proprietary school sector, offering programs ranging from cosmetology to welding, has experienced rapid growth. The increasing popularity of proprietary schools is attested to by the fact that the number of schools has grown every year since the beginning of this decade.

Rounding out the community of postsecondary education in Alaska are those services provided in-state by out-of-state institutions. These non-Alaskan institutions offer a variety of programs to military personnel and other state residents. Schools currently offering course work in Alaska include: Brigham Young University, the Cleveland Institute of Electronics, Loma Linda University, and

others. Without question, the people of Alaska have a keen and abiding interest in postsecondary education and the evidence is clear that the State of Alaska has responded admirably.

THE DILEMMA OF DECLINING REVENUES

This planning effort is directed at where we go from here. Unfortunately, there are few easy answers. Weighing heavily in this process is the strong likelihood that the wealth to which Alaska has grown accustomed will not be continuing. According to the latest forecast by the Alaska Department of Revenue, the state will experience a steady decline of nominal or current dollars during the next five years, and a substantial decrease in real dollars (and therefore declining purchasing power). At the same time, the public postsecondary education community will (and should) continue to try to provide for the increasing educational needs of the students.

Herein lies the dilemma. How can the state fulfill its educational responsibility to its citizens while remaining fiscally responsible? One poignant example clearly illustrates the problem. The total worth of all the facilities of the University of Alaska is approximately $410 million. The University's FY 1985 request of capital funds, for major projects alone, for the next five years totaled over $750 million and the total capital request approached $900 million! Despite this anticipated need, it appears quite unlikely that the State can afford to fund all, or even many, of

these requests. Indeed, the capital appropriation for FY 1986 was only $6.9 million. The University, cognizant of dwindling revenues, has since placed a limit of $300 million for major projects requests.

THE PLANNING PROCESS

Since very difficult choices will have to be made, it is crucial that the people affected by the decisions are convinced that their priorities are considered in a fair and equitable manner. It is fundamental that the citizenry have the opportunity to contribute to the planning process. Indeed, the goals and objectives of postsecondary education must be determined in an open marketplace of ideas and not be dictated by any single group or organization.

It is to these ends that the modus operandi of the plan was established. The procedures used for the development of this plan allowed for a substantial amount of participation by a wide variety of Alaskan citizens. The Commission itself is comprised of members who represent several constituencies within the postsecondary education community. An advisory committee to the Commission for the plan provided for representation of those interests within the State that are associated with or served by postsecondary education. Moreover, preliminary drafts of the plan were distributed throughout the State to elicit suggestions from anyone who wished to comment.

A considerable amount of information was collected about postsecondary education in Alaska. This information, periodically updated, was shared with the Commission and the advisory committee.

Regular meetings were held with officials of the University of Alaska as the plan progressed. Moreover, as strategies were developed, they were shared with a variety of interested persons for comment and suggestions.

THE GOALS OF THE STATEWIDE PLAN

This plan is a statement of advocacy for postsecondary education. The support is reflected in the four goals toward which the plan is directed. The planning goals for postsecondary education in Alaska are:

- PROMOTE EXCELLENCE to improve educational service;
- ENHANCE ACCOUNTABILITY of the educational process;
- FOSTER EFFICIENCY within the educational enterprise; and
- IMPROVE ACCESS to accommodate those citizens who desire postsecondary education.

Some of the strategies contained in this plan may relate to more than one of the goals. Also, inasmuch as each of the goals represent competing values, it is possible that a strategy may contribute to one of the goals and contravene another. Because this can and does occur, the strategies introduced tend to optimize rather than maximize each goal. That is, the attainment of each goal is subject to the constraints of fiscal and human resources and the demand placed upon the State for other services.

It should also be noted that this document presents goals and strategies which are general in nature and relate to statewide educational concerns. Goals more fundamental to each institution and strategies for obtaining these goals can be found in the individual plans of the state's postsecondary institutions.

THE ORGANIZATION OF THIS REPORT

This plan is comprised of five chapters. Chapter I explains the assumptions about the future planning period from 1986 to 1990. Chapter II describes the state of postsecondary education today. Chapter III provides a broad overview of the problems and issues facing American postsecondary education. Chapter IV provides a brief overview and explanation of each goal of the statewide plan. Chapter V presents the strategies which are grouped, with accompanying discussion, according to the goal with which each is associated.

CHAPTER I

Assumptions about the Future

Planning requires the identification of assumptions about the future relating to the demographic growth and distribution of the population, and the societal condition, economic health, and the educational needs of the State of Alaska. Assumptions provide the context within which recommendations are made.

The Commission reviewed and affirmed the assumptions listed below. Most of the assumptions about the future were developed by the Alaska Department of Commerce and Economic Development.* The predictions were obtained from a panel of over 90 distinguished and expert Alaskans using the Delphi forecasting method. The panel included past governors, legislators, local government officials, government agency heads, Native leaders, industry executives, university professors, and advocacy group leaders.

Delphi is a process for systematically combining individual expert opinions elicited from members of the panel. The technique utilizes a series of structured questionnaires mailed to the panelists, combined with feedback of interim results to panel members. Panelists are thus made aware of emerging panel positions. This forecasting method is particularly effective in identifying breakthrough and turning point events.

*A Delphi Forecast of Alaska's Development: The Year 2,000 & beyond, June 1983.

The following assumptions have been determined for the planning period 1986 to 1990.

Although the population growth will be approximately 2.5 percent per year, the population within the Railbelt and the Municipality of Anchorage will grow at more rapid rates. Moreover, there will be a significant increase of high school seniors from about 6,000 in 1986 to slightly over 8,000 seniors in 1990.

The Alaska Student Loan Program will be available throughout the planning period. Initially, slightly more than 50 percent of the students using the program will attend in-state institutions. This proportion will increase slowly throughout the five-year period.

As a system, the enrollment at the University of Alaska will increase. The community colleges will continue to enroll a high proportion of part-time students, however, there will be a slow but steady increase of the proportion of full-time students at the University centers. Telecommunications will be an increasingly important tool for providing educational access in rural Alaska. Federal support of organized research will continue to decline, albeit at a slower rate than in the past few years.

The General Fund unrestricted revenues for the State will steadily decline in real dollars during the next five years. This decline in available funds will increase public pressure for accountability and

effectiveness for all public institutions and services. Moreover, there will be continuing concern and increasing reluctance to invest in capital projects because of the anticipated revenue shortfall.

The major growth industries for Alaska will be coal, hardrock mining, fisheries, import substitution business, and tourism. Closely related to tourism is the increasing importance of the service industry, particularly in the urban areas. The timber industry is predicted to grow only moderately, while slow growth is the prognosis for the agricultural industry. The Pacific Rim will be an important market for most of Alaska's natural resoures.

CHAPTER II

The Present State of Postsecondary Education in Alaska 1985

The postsecondary education community in Alaska is comprised of six sectors; the University of Alaska system, independent non-sectarian colleges and universities, religious schools and colleges, publicly supported vocational schools, independent proprietary schools, and out-of-state institutions operating in-state.

With a total budget of over $270 million, the University of Alaska enrolls over 32,000 students, which equals about 92 percent of all students enrolled in postsecondary institutions in Alaska. Three out of four students enrolled in the University are part-time students, and the median age of all students is 27. The University, while offering over 200 different educational programs leading to a certificate or a degree, has three university centers, 11 community colleges, and 13 rural education centers. The locations of these units are shown in Figure 2 on the following page. Over 62 percent of the students enrolled at the University attend the community colleges. Additional data about the University is found in Appendix A in Volume II.

FIGURE 2

UNIVERSITY OF ALASKA SYSTEM

Locations of University of Alaska Sites

University Centers	Community Colleges	Rural Education Centers
Anchorage	Anchorage	Adak
Fairbanks	Bethel (Kuskokwim)	Cold Bay
Juneau	Fairbanks (Tanana Valley)	Bristol Bay
	Ketchikan	Delta/Greely
	Kodiak	Fort Yukon
	Kotzebue (Chukchi)	Galena
	Nome (Northwest)	King Cove
	Palmer (Mat-Su)	McGrath
	Sitka (Islands)	Nenana
	Soldotna (Kenai Peninsula)	Pribilof Islands
	Valdez (Prince William Sound)	Sand Point
		Tok
		Unalaska

Independent non-sectarian institutions are represented by Alaska Pacific University and Sheldon Jackson College. Alaska Pacific University, located in Anchorage, offers programs leading to the associate, bachelors, and masters degrees. Founded in 1959, Alaska Pacific University enrolls close to 700 students today. Sheldon Jackson College, in Sitka, which was established in 1878, is the oldest educational institution in Alaska. The college offers programs leading to the certificate, associate and bachelors degrees.

There are ten religious schools and colleges in the State. While most are located in Anchorage, others can be found in Glennallen, Homer, Kodiak, Palmer and Haines. The schools represent several different denominations and offer programs leading to diplomas, certificates, associate degrees or the baccalaureate.

Alaska supports two public postsecondary vocational schools. Established in 1970, the Alaska Vocational Technical Center in Seward offers a variety of vocational and technical programs. With dormitory facilities capable of accommodating 140 students, the Center enrolled over 1,500 students in 1984. The school emphasizes training of the underemployed and unemployed for skilled positions in private industry and government. Kotzebue Technical Center opened its doors in 1982 and now offers six vocational programs. Presently 65 students are enrolled. About 35 students reside in a local hotel, however, a dormitory is scheduled to be completed within two years.

The independent proprietary schools represent, by far, the largest number of postsecondary institutions in Alaska. Over 80 schools offer myriad programs and services which include secretarial science, masonry, radio broadcasting, and bartending. Included within this group are over 30 vocational-technical schools, several real estate schools, nine hairdressing/cosmetology institutes, modeling schools, flight instruction schools, and organizations that offer professional training and staff development.

Rounding out the postsecondary education enterprise are over 30 out-of-state institutions operating in-state. The schools provide educational services to military personnel as well as other citizens of Alaska. Their services include workshops, undergraduate and graduate work, in-service training, and review courses for licensing.

Complementing the educational services provided by a variety of postsecondary institutions, the State of Alaska provides financial assistance for postsecondary study through: The Alaska Student Loan Program, the Teacher Scholarship Loan Program, the WICHE Student Exchange Program, the WAMI Medical Education Program, and the State Educational Incentive Grant (SEIG) Program. These programs provide Alaskans with access to postsecondary education which otherwise might not be available.

The purpose of the Alaska Student Loan Program is to provide low-interest loans to Alaskans wishing to pursue education and training at a postsecondary level. The program has grown from serving

just over 1,000 Alaskans in 1971-72 to nearly 17,000 Alaskans in 1985. Just over one-half of the students using the loan program attend institutions in the State.

The Teacher Scholarship Loan Program was recently established by the Alaska Legislature to encourage rural Alaska high school graduates to pursue teaching careers in rural elementary and secondary schools in the State. One unique feature of this program is that the entire loan may be forgiven if, after graduation, the borrower teaches in rural Alaska.

Through its participation in the 13-state Western Interstate Commission for Higher Education (WICHE), Alaska provides residents with access to 16 fields of professional education not available in-state. The WICHE Student Exchange Program provides access to these 16 fields at participating institutions throughout the compact states, and makes these programs available at a reduced out-of-state tuition rate to Alaska's WICHE students.

The purpose of WAMI (Washington, Alaska, Montana, Idaho) is to provide medical education for students from these four states. Under the Alaska portion of the WAMI program, Alaska residents accepted at the University of Washington School of Medicine register concurrently at the University of Alaska and the University of Washington. The first year of medical training is with the WAMI program on the Fairbanks campus which includes one week of field work in a rural hospital. Students attend the second and third years in Seattle.

Their remaining medical school training is conducted either in Seattle or at clinical units in WAMI states. Alaska residents pay resident tuition at both institutions.

The State Educational Incentive Grant (SEIG) Program provides need-based grants to eligible Alaskans enrolled in undergraduate programs. Grant awards range from a minimum of $100 to a maximum of $1,500 each, depending on demonstrated need. One-half of each grant is federally funded, and one-half is provided by the state.

In all, the opportunities for the citizens of Alaska to participate in postsecondary education are considerable. In what direction the state will proceed in the years ahead depends upon many things, not the least of which is revenue availability to the state, and what share of those revenues the state is willing to dedicate to postsecondary education. The strategies contained in this plan seek to offer direction, not only in light of the inherent constraints placed upon postsecondary education, but also with regard to the responsibility of the State in providing quality education for its citizens.

CHAPTER III

Problems and Issues in Higher Education

Higher education in the United States is 350 years old. Since the founding of Harvard in 1636, it has manifested several forms, among them the private sectarian college, the school of technology, the state university, the complex municipal college or university, and the community or junior college. In the U.S. there has been neither a national ministry of government nor a state church to impose norms of university procedure and control, thus American higher education has never been forced to conform to any one uniform pattern of organization, administration, or support. This diversity is perhaps the one most distinguishing feature of American higher education.

There are, however, several problems and issues which cross the entire spectrum of the higher education community. Some of these have been around since the beginning, like financing higher education, vocational education, and the transition between high school and college. Others are relatively new to the scene--student indebtedness and problems relating to distance delivery of instruction.

This chapter provides a brief overview of the problems and issues which are being addressed, in some form or another, by the higher education community in the United States today. The following discussions provide a context to which the reader can relate those issues which are important

to Alaska. As will become evident, many of the problems which are addressed in this plan are also being faced in many other parts of the nation.

To help the reader associate the national issue with the situation in Alaska, reference is made to the related strategy in the plan at the end of each of the following discussions.

MEASURING QUALITY OF THE EDUCATIONAL PROCESS

Quality control is the top issue in higher education today, and at the urging of legislators and governing boards, many public colleges and universities are using or considering "value-added" tests and surveys in an attempt to measure what students learn in college. Value-added measurement instruments compare students' achievement before and after certain set periods of college study. The information obtained allows curricula to be refined and directed toward remediating students' deficiencies. Moreover, students also receive an explicit measure of what they have learned.

The following examples are illustrative of some of the efforts by states and institutions to measure quality.

- The Tennessee Higher Education Commission requires public universities to have self-evaluation programs to qualify for "performance-based funding," a percentage increase in their budgets.

•The Illinois Board of Higher Education has recently established a special committee to study the quality of undergraduate education.

•The Maryland State Board for Higher Education is studying the possibility of statewide value-added testing.

•The New Jersey Board of Higher Education voted to establish a College Outcomes Evaluation Program with special attention to the concept of value-added.

•South Dakota is presently testing half of all freshmen at the public institutions as part of a value-added program established by the state Board of Regents.

•The legislature in Colorado has established the Higher Education Accountability Program, which will penalize public institutions that do not set up programs to assess and improve students' learning.

•Empire State College, of the State University System of New York, offers individualized instruction to non-traditional adult learners at various centers throughout the state, and has found value-added testing helpful in measuring students' achievement.

•The State Council of Higher Education in Virginia has been asked by the legislature to prepare a report on how the knowledge that students gain in college can be evaluated.

•The states of Texas and Oklahoma have established panels to study the overall quality of higher education.

•The National Governor's Association has appointed Missouri Governor John Ashcroft to chair a committee to study the assessment of college quality. Governor Ashcroft stated that the committee will study value-added testing and suggest ways for state leaders to encourage their public higher education institutions to use it.

In an interview by the Chronicle of Higher Education, the governor from Missouri summarized the general attitude surrounding the notion of assessing quality through value-added programs. He asserted that value-added testing was "a real step forward for higher education. In the past, education has focused too much on process instead of achievement. There's no question that with scarce resources to support higher education, state leaders are going to reward schools with special dedication to student outcomes."

The catalysts for this foment are contained in three reports issued by various organizations. A National Institute of Education study group published Involvement in Learning: Realizing the Potential of Higher Education. This document argued the importance of assessing student performance and feeding that information back to the student, the faculty, and the college administration as a mechanism for improving the performance of both students as individuals and the overall performance of the college.

The Association of American Colleges report, Integrity in the College Curriculum: A Report to the Academic Community, laments the decline and devaluation of the undergraduate degree, and deplores the inattention that colleges and universities have paid to measuring their performance.

In rather strong language, the report asserts, "One of the most remarkable and scandalous aspects of American higher education is the absence of traditional practices and methods of institutional and social accountability."

To Reclaim a Legacy, a study sponsored by the National Endowment for the Humanities, accused colleges and universities of grossly neglecting the humanities, and particularly the study of Western civilization, in the undergraduate curriculum. Also, the Secretary of Education, William J. Bennett, who was chairman of the National Endowment for the Humanities when the report was issued, recently warned the higher education community to develop reliable measures of their success at educating students or risk having such evaluation undertaken by others outside of the colleges and universities.

In addition to evaluation strategies using the value-added concept, other states have developed competency tests for "rising juniors." Florida and Georgia recently instituted competency tests of basic skills in reading, writing, and computation which must be passed before students can enroll as juniors in the public colleges. Other states, such as New Jersey and Arkansas, are considering such examinations. Indeed, the Southern Regional Educational Board, in its report, Access to Quality Undergraduate Education, recommends statewide standards for basic academic skills required for advancement to the junior level.

Even without a state mandate, some public universities have initiated their own institution-wide or system-wide assessment exams. Two examples

of this strategy are the University of Minnesota and the California State College system.

Clearly, assessing the quality of the educational process in higher education is a national agenda. National concerns about the quality of undergraduate education and the increased involvement of state legislatures on assessing the educational process are affecting postsecondary education, and, as has been pointed out by James R. Mingle, Executive Director of the State Higher Education Executive Officers, we can expect states and institutions to use student performance as a legitimate criterion for program evaluation and for legislatures to apply pressure on state coordinating and governing boards to discontinue programs where students are failing licensing examinations and performing poorly on other standardized measures.

SEE STRATEGY 1 BEGINNING ON PAGE 84.

* * * * *

TEACHER EDUCATION

In 1983, the National Commission on Excellence in Education issued a report entitled, A Nation at Risk: The Imperative for Educational Reform. Using direct language, the report sharply criticized the American education system as mediocre at best. A set of recommendations were advanced which included: greater emphasis on math, science and basic skills; more rigorous instruction; more stringent requirements for

entry into teacher training; and improvement in teacher education programs. The report proved to be extremely provocative and it has sparked a great deal of controversy across the nation and elicited a flurry of activities.

The teaching profession is, indeed, in trouble. According to the National Center for Educational Statistics, burgeoning enrollments in elementary and secondary schools will soon contribute to an enormous shortage of teachers. Over the next eight years, the total number of teachers, currently about 2.4 million, will need to grow by about 300,000. Many school districts, already experiencing a shortage, are being forced to hire thousands of temporary teachers whose credentials normally would not entitle them to be certified. Primarly because of low salaries, the schools are failing to attract qualified professionals.

In spite of this shortage, the number of college students majoring in education is less than half of what it was a decade ago, overall college enrollments are dropping, and attrition rates among practicing schoolteachers are rising. A recent nationwide poll revealed that nearly three-quarters of the responding schoolteachers said they could not recommend the field of education to others without major reservations, if they could recommend it at all! One in five said they would advise others not to enter teaching.

Addressing these problems and issues are a cacophony of organizations and experts, which include the American Association of Colleges for Teacher Education, the American Enterprise Institute for Public Policy Research,

the National Center for Education Information, the American Federation of Teachers, the National Education Association, the Carnegie Forum on Education and the Economy, the Task Force on Teaching as a Profession--a panel created by the Carnegie Forum, the Holmes Group Consortium--a group of deans of education from 28 member institutions, the Council of Chief State School Officers, the Education Commission of the States, and the National Association of State Universities and Land-Grant Colleges. Each of these organizations has suggested proposals for strengthening teacher education in America. Complementing these efforts, many states have taken actions to improve the quality of their institutions' teacher education programs. For instance, thirty states have passed legislation or mandates which require the use of a test for admission to teacher training and/or for certification upon completion of training. In twelve other states, planning is in progress for similar changes.

The following is an overview of some efforts and activities which are changing the way America is preparing its teachers.

•Albert Shanker, President of the American Federation of Teachers, argues that teacher education schools must be restructured in order for reforms to work. This restructuring would include a greater use of technology, and the content of teacher education programs would be entirely rethought. Mr. Shanker also proposed a nationally recognized licensing examination for school teachers. At the National Press Club, Mr. Shanker defended his proposal by stating,

"One of the very good reasons for establishing such an examination is that it will undoubtedly result in an improvement and a reform of teacher education. It will show that many such programs don't stand up. It will compel teacher colleges to screen their students before they enter. It will certainly be worse than an embarrassment for some institutions if they certify that someone can be a teacher and a very large percentage of their graduates do poorly on such an examination."

•The New Jersey public schools have hired more than 50 "alternate route" teachers recently as part of a new state program. The teachers, who need not have taken education courses in college, must pay for the cost of a training program and work under the supervision of an experienced teacher for a year before they can be permanently certified. Qualifications for the program include a bachelor's degree with 30 credits in a major and the successful completion of a test in the subject area in which they want to teach. The program is designed to increase the number of teachers available and attract into the profession people with scientific and other types of backgrounds in short supply among traditionally-trained teachers. This controversial plan has elicited strong reactions. The Director of the Department's Office of Teacher Preparation noted that the existing system of teacher education in the state was allowing some of the weakest college students to go into teaching while course requirements for aspiring teachers made the field unattractive to better students.

•The American Association of State Colleges and Universities has instituted the "Showcase for Excellence" in an effort to recognize quality teacher education programs. The Association selected 17 teacher education programs which showed exceptional promise. Eighty-three entries were submitted to the Association.

•The Holmes Group deans have advocated limiting their own institutions' teacher education programs to the task of creating an elite core of highly-trained "career" and "professional career" teachers. Noting that a substantial portion of the teaching profession will continue to have a fairly high rate of turnover, the group envisions a "differentiated" profession in which, besides the two top tiers, many members would be recent college graduates who are willing to try teaching but are not certain whether they will "stay with it forever."

•Many organizations are lamenting the poor salaries that are paid teachers. Observing that last year's salaries averaged about $23,500 for all classroom teachers, the National Education Association proposes raising starting salaries to $24,000 a year.

There is some evidence that efforts to improve the teaching profession are starting to show some results. According to a report by the Carnegie Foundation for the Advancement of Teaching, teacher salaries have outpaced inflation, the gap between the Scholastic Aptitude Test scores of education majors and others has narrowed, and more teachers have entered the classroom than predicted. The report, a compendium of national and state-level data on teaching and teacher education, is encouraging in its tone. However, Ernest L. Boyer, President of the Carnegie Foundation for the Advancement of Teaching, urges continued vigilance and proposes the following steps for strengthening the teaching profession: a national recruitment program to attract outstanding

students into the profession; higher teacher salaries; more community recognition and support for teachers; and continuing education for experienced teachers.

It appears that the nation can be cautiously optimistic about the teaching profession in the future. It is clear that advocates and critics are suggesting proposals which will help to provide incentives and conditions that will make education an attractive, lucrative, promising and respectable profession. Although one educational leader has suggested that the overriding problem in reforming teacher education and certification was the "enormous diversity" of solutions being proposed by various states, academic institutions, and educational organizations, it is encouraging that these efforts are being made at all. Whether or not American education will rise above the tide of mediocrity is still open to question.

SEE STRATEGY 1 BEGINNING ON PAGE 84.

* * * * *

ECONOMIC DEVELOPMENT AND HIGHER EDUCATION

The nation's high-technology industries are expanding at an explosive rate. According to a report by the WICHE Western Technical Manpower Council, "Industries in computers, telecommunications, semiconductors, aerospace, and bioengineering as well as businesses stimulated by their growth--consulting firms, accountants, advertising agencies,

construction, lab technicians for production facilties--have accounted for the major part of the new job growth in the United States in the last decade...By 1990, the electronics industry on a global basis is expected to jump from the tenth largest to the fourth largest industry in the world, and by the year 2000, it is expected to be second only to energy."

These industries are dependent upon the nation's higher educational system to produce manpower because they are knowledge-intensive. They are based on the application of science to innovations in products and processes. It was observed in the report that of the 2.1 million persons employed as scientists, engineers, and technicians in 1980, almost one-half were technicians. Of the remaining 1.1 million, about 80 percent were engineers. And virtually all of these workers were trained in postsecondary institutions.

Recognizing that the higher education community is critical in the development of high technology, a recent study prepared by the Joint Economic Committee for the Subcommittee on Monetary and Fiscal Policy of the U.S. Congress asserted the following a few years ago.

> "The potential contribution of universities has generally been ignored or underestimated by localities. The survey shows that if properly utilized, higher education, and secondary education as well, may play the major role in helping a community or region attract high-technology firms...Unlike the more traditional manufacturing companies, high-technology companies apparently seek out a community noted for the excellence of its academic institutions, particularly in the sciences. Academic institutions ranked among the top five determinants of high-technology location decisions."

The potential of using quality higher educational institutions to attract industry is no longer being ignored. Very recently, several states are finding that close working relationships between higher education and corporations in high technology may provide the best single response to eroding revenue bases and economic stagnation. As new technological discoveries are made and commercialized within the corporate sector, the economic vitality and fiscal health of the state can be improved. As noted in The Chronicle of Higher Education, Governor Richard F. Celeste of Ohio is very aware of the direct relationship between higher education and economic development. His Assistant for Education and Job Training states, "It's pretty clear in our conversations with industries that are interested in expanding or locating here that quality education is a top priority in their decisions." The higher education community in Ohio has benefited from this attitude. The budget of the Regents' Excellence Initiatives, aimed at promoting economic development, increased from $7.5 million for the 1982-84 biennium to $61.6 million for the 1985-87 biennium. These initiatives include funds for universities to recruit emminent scholars, for community college programs to improve relations with industry, and for basic research grants that must be matched by grants from industry.

In Oregon, the governor led a four-day tour of the state's higher education campuses by forty business and civic leaders to draw to their attention the need for money for higher education. The tour, which stressed the economic growth that higher education can bring, persuaded wavering legislators in the state to support budget increases.

New Jersey is substantially increasing its funds for higher education in an effort to boost its economy by attracting high-technology industries. Governor Thomas H. Kean, who recently was re-elected by a substantial margin over his opponent, has received national attention because of his support of higher education. He is expected to endorse a substantial budget increase for higher education along with an additional $24 million for new science and technology programs at public institutions.

Other examples of states' efforts to promote business and industry by improving the quality of higher education include Georgia, where the governor is pushing for a $30 million biology building at the University of Georgia to promote high technology. Also, in Nevada, higher education appropriations are increasing from $154 million in the 1983-85 biennium to $197 million in 1985-87 in an attempt to meet industries' requests for more engineers in the region.

In spite of the high level of activity by several states to attract business and industry through improving their higher educational systems, there is a disturbing trend toward educational programs provided by business and industry. Rather than relying on the higher education community, many corporations have developed their own training program to fit the particular needs of their employees. Corporate education is a $40 billion industry which offers close to 20 degrees, and there are indications that this trend will continue. At the annual meeting of the American Council on Education, Stephen Muller, President of John Hopkins University, calls upon the business community to discontinue their increase in corporate education and to make a clear investment in the

nation's colleges and universities. He suggests that higher education and industry should form clear partnerships, along the lines of those developed in the early days of the research university.

It is clear that the relationship between higher education and business is a dynamic process, and it is difficult to speculate what will happen in the future. It is apparent, however, that universities, corporations and state government have all modified their organizational patterns in order to create an environment where the development of new high-technology innovations can proceed.

SEE STRATEGY 1 BEGINNING ON PAGE 84.

* * * * *

STUDENT RETENTION

Assessing the retention rates of students is a necessary and vital part of any program designed to evaluate the quality of a college or university. Indeed, understanding why students leave prematurely and why they stay provides information useful to virtually every aspect of the institution. In particular, tracking student retention can help evaluate the admission standards, academic standards, teaching methods, the advising program, and the contribution of each of the academic departments.

Although higher education institutions are, and should be, keenly interested in the academic progress of their students, properly designed studies at the institutional level are relatively rare. As the number of traditional college age students continues to decline, however, the number and quality of such studies may increase. Certainly, it is in the interest of both institutions and the students to increase the retention rate. According to a recent ACE survey, 62 percent of institutions currently offer special programs focusing on student retention and four out of five also offer courses on "coping with college."

There is common agreement among retention studies which identify those factors which enhance the retention rate of students. They include:

- Recruiting students who are a good "fit" personality-wise to the type of the institution;
- Increasing faculty/student interaction;
- Developing a good counseling program; and
- Encouraging a moderate amount of extra-curricular activity.

There is a considerable amount of evidence which suggests that colleges with good academic reputations generally have less of a problem with attrition. Also, a consistent finding is that academic background is the single most important variable affecting retention, and most factors other than academic background were found to be weakly related to retention. It has been observed, however, that most students who withdraw from college do not do so as a result of academic failure

per se. Thus, while prior academic achievement is a good predictor of persistence, the reasons for and the process of withdrawal are rather complex.

A significant portion of the research on student retention has been on the national and state level. One large-scale national study, The National Longitudinal Study of High School Seniors (LNS), has been carried out under the sponsorship of the National Center for Educational Statistics. This study is a long-term follow-up of the members of a high school graduating class of 1972, who are periodically surveyed. Among many other observations derived from the survey, it was found that 36 percent of all the first-time enrollments in 1972 received a bachelor's degree by 1976. Another 18 percent of the original 1972 cohort were still attending by 1976, either full time or part time. Plans are now underway for a new study of the class of 1988, which for the first time will include a postsecondary component of first-time freshmen. Such a study will permit, for example, an analysis of the reasons for college persistence and withdrawal.

The relationship between student retention and remedial education is receiving considerable attention. A recent survey conducted by the National Center for Educational Statistics (NCES) shows that, from 1983 through 1984, 25 percent of all college freshmen enroll in one or more classes in remedial mathematics, 21 percent took remedial writing, and 16 percent took some sort of remedial reading course. Of the 3,238 institutions polled, 82 percent offered at least one course in math, reading, and writing. The data from NCES show that, upon completion of

remedial courses, 60 percent of those students remained in college to their second year; for all college freshmen polled, 64 percent stayed in school to their sophomore year.

The state of New Jersey has been very active in assessing the success of remedial courses. Their study shows that skills-deficient students who complete the appropriate course sequences have almost three times greater chance for college success than students who do not complete remediation, thus enhancing retention rates for the students. It was reported that 31 percent of the entering freshmen need remediation in reading and writing, and over 60 percent were deficient in elementary algebra preparation.

Several states, among them Tennessee and Maryland, have conducted retention studies with particular attention to minority race students. Major efforts to enroll large numbers of minority race students were begun in the 1960s, and these efforts continue in the 1980s. Now that black students are attending formerly white institutions in signficant numbers, and to a lesser extent, white students are enrolled in historically black institutions, data bases have been developed to answer the questions whether there are differences in retention rates of black and white students. Generally, it was found that black students drop out of college at a higher rate and progress through college at a slower pace than white students. In Tennessee, it was found that minority race students have lower retention rates than majority race students on the same campuses.

It is encouraging that efforts are continuing to assess student retention. An honest assessment of why students stay and leave can reap enormous benefits for the higher education community. Developing strategies for retaining academically sound students, for whatever reasons, represents a noble effort which is beneficial to both student and institution.

SEE STRATEGY 2 BEGINNING ON PAGE 87.

* * * * *

LIBERAL ARTS AND THE COLLEGE CURRICULUM

During the past few years, there has been a plethora of reports, studies, and pronouncements critical of the undergraduate education provided by the nation's colleges and universities. One major thrust of the commentary focuses upon the demise of liberal arts as an integral part of the undergraduate experience. Recently, this was addressed by Diane Ravitch, Professor of History and Education at Teacher's College, Columbia University. She stated:

> "In recent years, there has been a decided trend away from the liberal arts and sciences. The emphasis increasingly has been towards programs and degrees that are technical, vocational, and commercial. American higher education, which ought to introduce its students to the best that has been thought and known in every major field of endeavor, has been turning itself into a job-training industry. The latest statistics show that the largest single undergraduate field in American colleges and universities is business and management. Last year, only 35 percent of the degrees granted were in the liberal arts and sciences. The smallest--and the fastest shrinking--fields are

the humanistic disciplines like history, literature, foreign language, and philosophy. The humanities together accounted for only seven percent of the undergraduate diplomas awarded."

Ms. Ravitch was a member of a study group which, under the direction of William J. Bennett, formerly the Director of the National Endowment for the Humanities and presently the United States Secretary of Education, published the now-celebrated report, To Reclaim a Legacy: A Report on the Humanities in Higher Eduation. The report identified a number of trends and developments in higher education which are disturbing:

•A student can obtain a bachelor's degree from 75 percent of all American colleges and universities without having studied European history, from 72 percent without having studied American literature or history, and from 86 percent without having studied the civilizations of classical Greece and Rome.

•Fewer than half of all colleges and universities now require foreign language study for the bachelor's degree, down from nearly 90 percent in 1966.

•The sole acquaintance with the humanities for many undergraduates comes during their first two years of college, often in ways that discourage further study.

•The number of students choosing majors in the humanities has plummeted. Since 1970, the number of majors in English has declined by 57 percent, in philosophy by 41 percent, in history by 62 percent, and in modern languages by 50 percent.

•Too many students are graduating from American colleges and universities lacking even the most rudimentary knowledge about the history, literature, art and philosophical foundations of their nation and their civilization.

Others share Bennett's concern. Mark Curtis, President of the Association of American Colleges, wrote: "the chaotic state of the baccalaureate curriculum may be the most urgent and troubling problem of higher education in the final years for the twentieth century." Clark Kerr noted that the undergraduate curriculum is "a disaster area." A common theme of the critics is that colleges and universities lack a vision of what it means to be an educated person. It is to this issue that the report provides a solution. The report recommends that the nation's colleges and universities must reshape their undergraduate curricula based on a clear vision of what consitutes an educated person, regardless of major, and on the study of history, philosophy, languages, and literature. Also, it is recommended that faculties must put aside narrow departmentalism and instead work with administrators to shape a challenging curriculum with a core of common studies.

Students graduating from the colleges and universities in Alaska during the past several years, like their counterparts in the lower 48, are increasingly shunning the liberal arts. For instance, at the University of Alaska, 41 percent of the baccalaureate degree recipients in 1980 majored in liberal arts disciplines. In 1985, that percentage decreased to 31 percent. The students at Alaska Pacific University and Sheldon Jackson College have displayed similar trends. It should be noted,

however, that each of the institutions offers core curriculum requirements which embrace and provide a broad foundation in the humanities, social sciences, and natural sciences.

SEE STRATEGY 4 BEGINNING ON PAGE 95 AND STRATEGY 15 BEGINNING ON PAGE 130.

* * * * *

TRANSFER OF CREDIT

The transferring of credit by students between postsecondary institutions has received much attention by states and institutions for many years. Indeed, articulation/transfer relationships have existed since the beginning of the two-year college movement. These arrangements have taken several forms, which include documents known as equivalency guides issued by institutions, agreements negotiated by individual colleges and universities or by segments within a state, and guidelines and policies developed and controlled by state agencies or commissions. According to their recent publication, The Articulation/Transfer Phenomenon: Patterns and Directions, Frederick C. Kintzer and James L. Wattenbarger reveal that statewide articulation and transfer agreements now exist in various forms in about thirty states.

Articulation has received attention because students have encountered difficulties when they sought to apply the credits they had earned at one institution to the graduation requirements of another institution. The Nebraska Coordinating Commission for Postsecondary Education has noted that credit transfer problems evolve about five major obstacles:

1. Program incompatibility--a program in one institution is not the same as in another. Thus, the requirements vary, the method of instruction may be different, and there are differences in grading procedures.
2. Institutional incompatibility--an institution with a primary mission of preparing students in the liberal arts for graduate work in their professions is not necessarily compatible with an institution which has teacher education as a primary mission. Institutional goals and objectives, therefore, vary as much as program goals and objectives, and the transfer of all credits may be difficult to achieve.
3. Postsecondary sector incompatibility--a two-year institution which has a primary mission of preparing students for the world of work will have different program goals and objectives than a four-year institution whose primary mission is that of preparing a student for a professional career or for further academic or professional study.
4. Degree requirements and transfer procedures which lack clarity or are unknown--the student who wishes to, or plans to, transfer simply is unaware of the procedures and/or hazards in doing so. This problem is compounded when institutions, administrators, and faculty members are unaware of the established rules, regulations, and procedures.
5. Changing program and degree goals of students--the goals and objectives of students often change. Without careful guidance regarding such changes, the student may lose a substantial number of credits in transferring to another major program or degree program.

The major purpose of transfer agreements, irrespective of their origins or process, is to permit the student to plan a total degree program from the outset and, with successful academic performance, make uninterrupted progress even though transfer is involved. In a complementary way, the state's interests are served by having its higher education resources used optimally by reducing the time taken to complete a degree through the avoidance of repeated class experience.

In recent years, there has been an upsurge of interest in articulation and transfer. This interest is manifested by comprehensive studies generated by states, formulation of statewide policies, and single institutional efforts to improve information exchange and other articulation services. There is evidence of several other developments, presented by Kintzer and Wattenbarger, which bear mentioning. State legislatures are becoming more and more involved in internal institutional operations by requiring transfer rather than merely encouraging it. Thus, statutes in several states have (1) enacted arcticulation/transfer agreements into statutory laws; (2) required coordinating bodies to develop specific policies on statewide transfer agreements; (3) required postsecondary educational institutions to establish cooperative agreements with business and industry; and (4) authorized community colleges to enroll high school students prior to their graduation from high school.

Also, a wide array of educational courses is now provided by business and industry, labor unions, professional organizations, government, and municipal agencies. Between thirty and forty million people are

involved, and perhaps a majority are enrolled in what is advertised as "college-level work." Thus, linkages are being developed between business/industry and postsecondary educational institutions. This appears to be a logical outgrowth of the concept of life-long learning, which is entrenched in the American way of life and which recognizes the need for a diversity of services provided by a variety of organizations. Despite growing interest in the collaboration between higher education and the business community, credits resulting from these linkages are still not broadly applicable.

Another significant movement is the increased competition between community colleges and proprietary institutions. Between 1974 and 1978, the number of trade and industrial schools increased by 36.4 percent. It is noted that recent research on the success of the two sectors in meeting the demands of the job marketplace has favored proprietary institutions, thus intensifying the rivalry. The authors note, "While some articulation agreements have been formalized between community colleges and proprietary schools, these exchanges are still few, and their relationship remains strained."

The problems associated with the transfer of credits continue to exist in the higher education community. A summary of some current trends which relate to this issue include:

- Students will continue to demand clearly-stated policies and guidelines which would serve to provide for smooth movement from one level of education to another.

•There will be a tendency for these policies and guidelines to become officially adopted by governing boards, coordinating boards, institutional management, legislatures, and other operating agencies.

•Students' concern for receiving full credit for all courses and other related experiences that they have completed will increase. These experiences may be far removed from traditional degree requirements.

•There will be an increasing concern for the development of organized procedures for the recognition of experiences outside regularly organized courses.

The dynamics of higher education preclude one-and-for-all time curricula and perpetual grading and retention systems. However, as the authors have summarized, "Higher education has, like other areas of the modern society, become more client-centered and more quality conscious. These two concepts are often in conflict. Articulation and transfer have been a concern of both community college leadership and university leadership, but for different reasons. The future will show an increasing concern, but still for different reasons."

SEE STRATEGY 8 BEGINNING ON PAGE 107.

* * * * *

REMEDIAL EDUCATION

Within the past decade, there has been a growing awareness of the increased amount of remedial activities at the collegiate level. According to a recent survey by the National Center for Educational Statistics (NCES), enrollment in remedial college courses has grown by more than 10 percent since 1978. Remedial courses are offered by 94 percent of public institutions and 70 percent of independent institutions. Those institutions that offer remedial courses, however, do not limit them to basic skills. Almost 60 percent of the schools polled offer additional courses in student development and 21 percent offer remedial courses in other areas. Although remedial courses are thought to be more successful if students receive credit for taking them, 70 percent of the institutions polled do not award full credit. Fifty-three percent offer institutional credit, which determines a student's enrollment status but does not count toward degree completion.

Along with the increase in remedial courses is the perception by many of declining achievement in colleges and universities. Grade inflation, which was particularly prevalent in the 1970s, has contributed to a nagging uncertainty about student performance and the academic standards throughout the higher education community. At issue is the need for substantially improved remedial programs. If colleges and universities are to maintain access, while at the same time avoid further degrading of the meaning of the college degree, documenting successful results of remediation programs is essential. That is exactly what at least one state is doing.

In 1978, the New Jersey Department of Higher Education began testing the basic skills--reading, writing, computation, and elementary algebra--of the 50,000 freshmen who entered New Jersey's public colleges each year. A report published in January, 1985 focuses on the effectiveness of the remedial programs. The most important finding of the report is that skill-deficient students who complete the appropriate remedial course sequence have a far greater chance of college success than students who do not complete remediation. In fact, it was found that retention is actually higher at both two and four semesters for those students who complete remediation than for students who did not need remediation. The Basic Skills Council of the Department of Higher Education, a group of 12 faculty members and administrators representing the various sectors of the state higher education system, has recommended that since the academic benefits of completing remediation have been clearly demonstrated for full-time students, New Jersey's public colleges should improve their rates of testing part-time students and ensure that all skill-deficient part-time students enroll in remediation by their fourth semester of attendence.

Ohio has taken a novel approach to remediation. The Ohio Board of Regents is administering a statewide testing program to high school juniors in 600 of the state's 900 high schools. In this voluntary program, high school juniors are examined on writing, science "readiness" and mathematics skills. In the case of mathematics, students receive information from the Ohio college of their choice as to their likely placement in math sequences and their eligibility to pursue particular majors. This procedure allows students to take corrective action in

their senior year of high school. College faculty members are also serving as resources to the school in improving the curriculum. The effect on student readiness for college-level work has been significant. The Ohio State University reports that the number of students enrolling directly from high school who require remediation in mathematics has declined from 37 percent in 1982 to 14 percent in 1984.

The program in Ohio has attracted national attention because many states recognize that efforts to deal with students' deficiencies while they are still in high school is especially productive. Also, several state politicians are simply growing weary of providing public funds for remedial education. At a recent meeting of the National Conference of State Legislatures, many legislators expressed disdain for remedial programs at the college level and proposed a variety of methods to reduce the need for such programs. They included raising high school graduation requirements, improving communication between state planners for secondary and postsecondary education, and eliminating credit for remedial courses in higher education. A number of legislators saw remedial programs as a pernicious practice of colleges to maintain enrollment growth. Complementing this attitude, other legislators stated that underprepared students should not be allowed to enroll in a college or university and should attend a vocational school. Others strongly argued that there is a need for remedial education programs in college because the elementary and secondary school systems have not functioned well enough to ensure that students are able to perform college-level work.

Remedial education is seen by some as a means of expanding opportunity for higher education to many students who would not otherwise be able to attain it. There are others who depict it as a waste of time and resources used to merely keep students in college who shouldn't be there in the first place. Regardless of one's view, however, providing remedial courses at the collegiate level is a fait accompli. Thus, the question is not <u>if</u> we address this issue, but <u>how</u> we address it in this time when the quality of all education is being questioned.

SEE STRATEGY 10 BEGINNING ON PAGE 113 AND STRATEGY 22 BEGINNING ON PAGE 147.

* * * * *

PRESERVATION OF EXISTING FACILITIES

The higher education community in the nation has experienced an extraordinary growth since the 1950s. Not only have many new colleges and universities been established, but virtually all existing institutions have expanded in an unprecedented fashion. As a result, this rapid growth has created an increasingly large obligation for the future renewal and replacement of the physical plants.

Unfortunately, often the need for plant renewal has not been fully realized or accepted by many colleges and universities. This has been especially true in recent periods of declining resources and has resulted in an inadvertent erosion of the capital stock. Maintenance is usually the first budget item to be cut; maintenance cuts usually go unnoticed by

the public because their effects are not felt immediately as changes in the levels of services delivered. If the erosion continues unchecked, many colleges and universities may be faced with ever-increasing repair and rehabilitation costs or a staggering replacement burden.

A principal reason why these conditions have developed is the lack of accepted quantitative methods for evaluating and measuring maintenance needs. Methodologies for defining maintenance needs and programs are traditionally one of the three following types:

1. Straight-line or historical funding--the previous year's budget base is incremented by a certain percentage annually to compensate for identified changes such as inflation, additional personnel, etc.

2. Identification of needs based on physical survey--a comprehensive facilities audit is conducted to identify and quantify all current maintenance deficiencies.

3. Formula funding--annual maintenance needs are expressed in terms of cost per square foot, number of full-time employees per square foot, or a certain percentage of current physical plant value. The most commonly accepted formula funding methodology is utilizing a fixed percentage of the current replacement value of the physical plant. The percentages range from 1.0 percent to 2.5 percent. The most commonly cited value for budgetary purposes is an annual maintenance budget of 1.1 percent of the current replacement value of the plant.

Each of these methods has one or more major deficiencies. Often, the straight-line or historical funding does not match funding levels against identified needs. Moreover, there is no way in which the established base which is being incremented can be validated. Physical survey is an extremely accurate assessment of immediate needs, but has no provisions for identifying long-term requirements. Formula budgeting is quantitatively based and can easily be utilized to project future needs. The formula method, however, only provides a general overview and cannot address the needs of a specific physical plant. The validity of this methodology becomes even more questionable in view of the tremendous variety in age of facilities, usage, construction materials, and construction methods.

Since necessity is often the mother of invention, several strategies for more accurately assessing and providing for physical plant maintenance have been proposed. For illustrative purposes, the following methodology being discussed at the University of Illinois is briefly presented here.

In an effort to provide appropriate budgets for the necessary funds for preventing deterioration of the physical facilities, SR^3--space realignment, renewal and replacement--was developed. Basically, this approach focuses upon differential life spans of facilities. The concept is based upon the premise that a building has an infinite life as far as the foundation, superstructure, and exterior skin are concerned. The remaining parts of the building deteriorate and become obsolete as programs change and facilities get reassigned. It is assumed that the remaining components of most buildings undergo the equivalent of two complete changes within one hundred years.

The foundation, superstructure, and exterior account for approximately one-third the cost of the building (that part for which an infinite life is assumed), thus as a rule-of-thumb, two-thirds of the building continuously undergoes deterioration, obsolescence, and changes due to program requirements.

These components have varying life spans depending on the quality and type of material initially used and the annual maintenance provided. Using an elaborate formula based upon the predicted useful life of the building components, a realistic assessment of funds required for maintenance can be established.

SEE STRATEGY 12 BEGINNING ON PAGE 122.

* * * * *

VOCATIONAL EDUCATION

The term vocational education engenders a multiplicity of viewpoints by educators, legislators, bureaucrats, businessmen, and labor organizations. Even the definition is elusive. The federal government defines vocational education as organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree. Others suggest that all organized education is vocational in nature because it prepares the student for some type of work. Irrespective of any agreement on the

definition of vocational education, finding a consensus on the content of a vocational education curriculum is simply impossible, especially now as the perceived demise of the liberal arts in postsecondary education is receiving considerable attention. Often, the debate is reduced to an either/or proposition which is reflected in what is known as the law of selective advancement: "The person who knows 'how' will always have a job. The person who knows 'why' will always be his boss."

A more thoughtful reflection upon the relationship of postsecondary education and work is offered by James O'Toole of the University of Southern California. He suggests several fundamental questions which should be addressed when considering the nature of vocational education in the postsecondary education enterprise. They include:

- What can or should postsecondary education do to meet the increasing desires of social mobility and equality?

- Are there some social functions that should legitimately remain outside of the domain of higher education, for example, training people for specific jobs or attacking the problem of unemployment?

- Is there such a thing as overeducation or is it more accurate to say that college graduates are underemployed? That is to say, should education be reformed or jobs be redesigned?

- What should be the relationship between employers and educators? Who should serve whom, or should there be an equal partnership?

- Does liberal education have any value in people's working careers?

- Should work be made into learning experiences, or should education be made more like work?

- Can or should education provide work skills, labor market information, and job experience? If so, for whom, when, where, how, and in what amounts?

That these questions have not been fully and finally answered is indicative of the complexity and controversial nature of vocational education. Indeed, perhaps the only agreement among traditional vocational and liberal approaches to postsecondary education is that higher education should prepare students to work in an unpredictable and complex future. The late Robert Hutchins offered this advice: "If I had a single message for the younger generation I would say, 'Get ready for anything, because anything is what's going to happen.' We don't know what it is, and it's very likely that whatever it is, it won't be what you now think it is."

When defining vocational education as that part of the educational process that relates directly to paid or unpaid employment, it is clear that the nation's postsecondary education community is in the business of offering vocational training. Consider the following: virtually all of the two-year colleges offer vocational programs and about a third of the four-year institutions offer some type of vocational training. Add to this number approximately 800 public, non-collegiate postsecondary schools, close to 100 correspondence schools, over 500 state correctional

facilities and about 7,000 proprietary schools. According to the most recent data, close to seven million students are enrolled in some form of vocational training in the postsecondary education community. The majority of these students are enrolled at two-year institutions and about one million are enrolled in proprietary schools.

In direct competition with the established postsecondary education community is education offered by American industry and business. In her provocative book, Corporate Classrooms, Nell P. Eurich has brought to light information concerning the scope of business-based education that heretofore has only been dealt with in a fragmented fashion. Her research is very illuminating by portraying the magnitude of the effort.

Corporations define education and training programs as a regular cost of doing business, and to train and educate their employees, they are spending huge amounts of money. Estimates range from $40 billion upward, approaching the total annual expenditures of all of America's four-year and graduate colleges and universities. Moreover, the number of employees involved in corporate education may equal the total enrollment in those same institutions--nearly eight million students.

The author states, "Education and training within large private-sector corporations of the United States has become a booming industry. Millions of adults, as employees, pass through corporate classrooms every year; an unaccountable number more are given what is generally called on-the-job training. America's workers and managers have been going back

to school for a long time, but in the last decade their numbers have increased, the variety of subjects they study has broadened, and, most strikingly, America's business has become its own educational provider."

It is noted that much of the classroom examples come primarily from the Fortune 500 companies, yet, depending upon the industry, some require more constant education and re-education than others. For instance, banking and insurance firms have a long history in education and have developed well-established programs located in every large population center. In the fields of merchandising and retail sales, training has not received much attention yet, however, there are some impressive training centers in operation today like McDonald's Hamburger University and Holiday Inn University. It is all too clear that corporate classrooms are challenging the traditional postsecondary education enterprise to reassess their role as the primary provider of educational services.

SEE STRATEGY 13 BEGINNING ON PAGE 124.

* * * *

SUPPORT OF THE INDEPENDENT SECTOR OF HIGHER EDUCATION

The future of independent colleges and universities in the nation is in jeopardy. Costs are rising. Student aid and research funds are being cut. The 1960s and 1970s witnessed extraordinary growth in the size of the postsecondary education establishment with a rapid rise in the

relative size of the public sector. Now, as the decline in the traditional college-age population continues and the race to recruit students is becoming more intense, independent colleges and universities are facing lopsided competition from the public sector primarily because of the "tuition gap." Will independent higher education, as one author states, "go the way of railroads and downtown shopping districts?"

Without question, independent colleges and universities are a valuable national resource. The Carnegie Council on Policy Studies in Higher Education affirms the benefit of the independent academic community in their report, The States and Private Higher Education. They state:

"We value the private sector for the following reasons:

--its independence of governance

--its diversity

--its long-standing traditions that are so meaningful to its students and its alumni

--its competition with the public sector

--its devotion to liberal learning (95% of all liberal arts colleges are private)

--its standards of academic freedom (the American Association of University Professors censured 72 public institutions between 1966 and 1975, but only 28 private institutions)

--its attention to and attraction for the individual student

--its contribution of a high proportion of the institutions with the academically ablest students and faculty members

--its contributions to the cultural life of many small towns, rural areas, and even urban enclaves, as the major or only source of public

lectures, theatrical performances, art exhibits, and presentation of musical events

--its provision of wide access for students by income group and by minority status."

A number of studies have suggested that the future of the independent higher education is bound inextricably to public policy. Three major themes emerge from these reports: (1) independent colleges and universities in the nation are public resources and serve a predominantly public function; (2) it is questionable public policy to expand state-supported institutions while independent college facilities lie underutilized; and (3) to the extent independent institutions educate citizens of the state, they save the taxpayers money.

It is to this last theme that John Silber, President of Boston University, so eloquently addressed his testimony to the Education Committee of the General Court of Massachusetts:

> "All students are members of the public. All higher education is public higher education for the simple reason that there is nothing but the public to educate. One sector of public higher education, better called independent, provides the cost of education through substantial tuition charges, fees, and outside income in the form of gifts and grants. The other sector, more accurately called state-owned or state-subsidized, assigns the cost of education to the taxpayer: its operating expenses are provided in annual appropriations, its facilities are financed by bond issues of the commonwealth; and tuition payments by the student are minimal.
>
> Both sectors educate the public; both are public education. They are differentiated only by the mechanisms each uses to pay the costs. A low tuition does not mean a low cost of education; it merely means that someone else, the taxpayer, is meeting the bills. A high tuition does not imply an undemocratic philosophy; it merely demonstrates that, where there is no Santa Claus, deficits are synonymous with bankruptcy."

In general, states play major roles in providing support to independent higher education because they recognize the valuable service role provided by independent colleges and universities in meeting society's demand for a skilled and educated workforce. The states realize that the programs offered by this sector are good investments in addition to enhancing the social, economic, and cultural development of its citizens.

Each state has its own objectives and reasons for appropriating funds to support independent institutions and the students who attend them. Fundamentally, state aid to independent higher education takes three forms: (1) direct institutional aid, (2) student financial assistance, and (3) state tax policies.

Seventeen states provide direct institutional aid to the independent sector which contributes to the ability of independent colleges and universities to offer programs of excellence to state residents. These grants provide an efficient use of state funds and often are less than the comparable costs in state colleges and universities. Additionally, special purpose contracts ensure access to specific programs that otherwise would not be available in an area.

Every state offers some form of financial assistance to undergraduate and graduate students. Twenty-three states offer programs for which only students attending independent colleges and universities are eligible to participate. These programs are aimed primarily at reducing the tuition gap between state and independent institutions, which makes it easier for a student to choose an educational program that best suits his or her

needs without being influenced completely by the price of the program. Additionally, the states realize a cost savings since these programs are less than what it would cost to educate these aid recipients in state institutions.

Nine states have developed tax policies that relate to the treatment of education costs. These policies included exemption of educational expenses, credits for contributions to institutions, personal exemptions for dependents enrolled in college, deductions for dependents in college, and "IRA-like" funds for education. Most of the tax policies allow tax credits. For instance, individual taxpayers in Idaho are allowed a credit for charitable contributions made to state and independent institutions of higher education. The maximum credit allowed is one-half of the contributions with a ceiling of 20 percent of the taxpayer's Idaho tax liability and a ceiling of $50 on individual and $100 on joint returns.

As we march inexorably toward the 21st century, clearly the fate of many independent colleges and universities rests in the hands of the states in which they reside. It is somewhat ironic to note that, beginning with Harvard in 1636, higher education in the United States was primarily private in origin and support. Although some southern states founded state universities before the 19th century, overall collegiate education was largely furnished by the independent sector for the next 100 years. Even after the initiation of land grant colleges and the establishment of normal schools for training teachers in the later part of the 19th century, the bulk of enrollment was still in independent colleges.

Indeed, the idea of state support for private higher education began with the founding of the first college in the United States. Colonial legislatures aided independent colleges by including special privileges in their charters, excusing faculty and students from jury and military duty, providing permanent monetary endowments by statute, exempting faculty and students from taxation, granting land endowment, directly appropriating state funds, granting lottery privileges, and making special gifts of buildings and sites. Now that the vast majority of students in the nation are attending public institutions, it remains to be seen whether the states will maintain a strong commitment toward the independent institutions.

SEE STRATEGY 14 BEGINNING ON PAGE 127 AND STRATEGY 15 BEGINNING ON PAGE 130.

* * * * *

COLLABORATION BETWEEN HIGH SCHOOLS AND COLLEGES

Recent national studies indicate the distressing fact that increasing numbers of students are entering college with academic deficiencies, hindering expected progression through the college curriculum and stepping up the need for remedial coursework at the college level. Open admissions policies, which are more prevalent than the college catalogues would indicate, have provided little incentive to high school students to gain the preparation they need for success in college. Additionally, minimal communication between high schools and colleges has caused confusion over what the expectations are for freshmen.

At both the state and local levels, however, educational institutions are undertaking projects to improve the preparation of high school students for college. Although these activities are disparate, they do provide models which other institutions can emulate. Ernest L. Boyer, President of the Carnegie Foundation for the Advancement of Teaching, provides five basic principles of high school/college collaboration which are crucial for effective progression of students from high school to college. These principles are summarized below:

One: To achieve school/college cooperation, educators at both levels must agree that they do indeed have common problems.

Education is a seemless web and communication between the sectors is urgently needed. Although it seems apparent, Boyer notes that many educators are convinced that they can educate their respective constituencies without regard to this basic premise.

Two: In order to achieve greater collaboration, the traditional academic "pecking order" must be overcome.

Colleges and universities have had for many years a "plantation mentality" about secondary schools. Higher education has set the ground rules and schools were expected to go along passively. A good example of this is the way college admission requirements are established and abandoned. Faculty committees deliberate in splendid isolation, they make decisions that have enormous impact on the school curriculum, and yet these dramatic moves are made with no consultation with either teachers, principals, or superintendents.

Three: If school/college collaboration is to succeed, the project must be sharply focused.

The point here is that school/college "togetherness" must be something more than an academic love-in. Serious cooperation will occur only if school and college administrators and faculty agree to concentrate on one or two specific goals and work to keep the program sharply focused.

Four: If school/college cooperation is to succeed, those who participate must get recognition and rewards.

Boyer cites the Syracuse University Project Advance which allows seniors in high school to participate in college credit courses in biology, calculus, chemistry, English, psychology, religion, and sociology. These courses are taught by high school teachers trained by Syracuse University and supervised by professors in the appropriate departments. The teachers in the program are paid a stipend to participate in the Syracuse Summer Training Program and they receive the title Adjunct Instructors, making them eligible for scholarship grants at the University. The participating professors also get paid as consultants, they have "celebrity status" at the school, and they feel they are making a difference.

Five: For school/college cooperation to succeed, it must focus on action--not machinery.

Time and time again, the most successful programs are those where people see a need and find time to act--with little red tape or extra funding. While resources are important, they should not become the

preoccupation of school and college planners. When people think about cooperation, they focus first on budgets and bureaucracy--on the costs involved, on hiring one or two directors, on renting space, on such high priority items as paperclips and new letterhead. This has been and will continue to be self-defeating.

Michael O'Keefe writes in the Current Issues in Higher Education that programs that attempt to link more closely high school and colleges usually seek to accomplish several purposes. A major purpose is to enhance the articulation of the student out of his or her high school program and into college. Several approaches have been developed to avoid duplication in course work, allow students to begin college-level work while still in high school, or even matriculate into college before receiving the high school diploma. Another purpose of these programs has been to help improve the quality of secondary education with emphasis on ensuring adequate college readiness for high school graduates. A third objective has been to build professional working relationships between high school teachers and faculty of postsecondary institutions. He notes that one of the hallmarks of really effective high school/college programs appears to be the extent to which the college faculty and the high school teachers are able to genuinely work together to accomplish their shared goals.

The vast majority of these programs are focused upon that portion of the high school student population who intend to earn a baccalaureate. Dale Parnell, President of the American Association of Community and Junior Colleges, has recently noted in his book, The Neglected Majority, that

three out of four high school students will not go on for a bachelor's degree. Thus, he has called on the community colleges to work with high schools on an alternative to the typical secondary school curriculum, which prepares students for either a bachelor's degree or a vocation. He proposes a four-year course of study beginning in the eleventh grade and completed during the second year at a community college. This "two plus two tech-prep" associate degree would provide for a broad-based competence in a career field at the high school level and more intense specialization at the community college, along with "broad educational competence" aimed at enabling a graduate to switch successfully. Several community colleges have begun working with local high schools to coordinate curricula. Among them include Thomas Nelson Community College in Virginia, the Kern Community College district in California, and Hagerstown Community College in Maryland.

In summary, the challenge of providing a smooth transition for students from high school to college has been met in several areas around the country. It is encouraging that many high school and college people have moved beyond pious platitudes and are actually running collaborative programs in the schools. There is every reason to believe that these programs will continue to flourish and grow because they simply make good sense.

SEE STRATEGY 16 BEGINNING ON PAGE 132.

* * * * *

THE NON-TRADITIONAL STUDENT

Old habits die hard. Much of the literature and commentary about higher education assumes that the typical American college student is no older than 24 years. Phrases such as "building foundations for life" or "preparation to pursue beginning careers" can be found in almost any discussion about the mission of higher education. There is a not-so-benign neglect of consideration of the so-called "non-traditional" student--the student who is over 24 years and is generally attending school on a part-time basis. As Harold Hodgkinson has noted,

> "Colleges and universities have benefited from the rapid growth of continuing education programs...(but) in many cases instruction is carried on as if the adults were normal post-pubescent adolescents, while the average (sic) in the class may be 40, and level of sophistication very high."

The facts clearly indicate that the "non-traditional" student has become a dominant force in higher education. According to Change magazine, of this year's 12,247,000 students, 6,251,000 (51%) are female, 5,295,000 (43%) are 25 or older, and 5,547,000 (45%) will attend part-time. Without question, the non-traditional student has begun to, and will continue to, affect many aspects of the higher education enterprise, especially curriculum design and the teaching-learning process.

Changes are beginning to appear in the academic community. Day-care centers can be found in many colleges and universities, which allow female students not only to attend college, but also to increase their course loads. Colleges and universities have altered their course

offerings to reflect what older students want, noting that large numbers of adults attend college to reenter the workforce, upgrade themselves in their jobs, change careers, or take courses for recreation.

Survival is a major factor in the higher education community's efforts to accommodate the older student. Since 1981, there has been a 12% drop in the number of high school graduates, and since 1980, the number of 19- to 24-year-olds, the traditional college-going population, has fallen 5%. In spite of this, the National Center for Education Statistics estimates that enrollment this fall is down less than 1% from last year. As reported in the Chronicle of Higher Education, college officials cited, as one reason for stable enrollments, more aggressive recruiting of older students.

Another term that has crept into the higher education parlance is the "learning society," which simply means that people are engaged in learning throughout their life span. The medical establishment suggests that today's students may have life spans of over 90 years or more, and this can have a profound effect upon higher education. Of particular note is the increase of the number of students 50 years old or older. For instance, only until recently many graduate schools would not admit students beyond the age of 40. Alan Pifer, who established the Aging Society Project in 1982, has received a large number of letters from people in their 50s and 60s saying they were eager for new challenges and jobs, for new lives even, and were terribly frustrated that there were no channels for that sort of thing. He notes that, "If older people, 50 or beyond, are going back to higher education for job-related purposes, they

want that experience to be intensive. It can't be long and drawn out and filled with a lot of things that, from their points of view, are peripheral. They need that education or training quickly; they want it concentrated and related to a goal they have, and they probably need help getting back into the labor force promptly." On the other hand, the liberal arts can also play an important role in the education of the older student. Many retired persons are continuing their educations for life enrichment, and higher education will see an expanding role in providing education for recreation and entertainment.

One important challenge for higher education as we approach the year 2000 is to develop the capacity to provide suitable educational experiences and delivery systems for students of all ages, whether full-time or part-time. As was discussed in another section of this chapter, traditional colleges and universities no longer have a monopoly on adult education. Schools established by businesses and industry are providing educational opportunities for approximately the same number of students that are enrolled in America's four-year and graduate colleges and universities. It seems clear that as the higher education community strives to find ways to more effectively meet the educational concerns of an aging population, virtually all aspects of the higher education community will be altered to some degree. At the same time, as Ernest Boyer, President of the Carnegie Foundation for the Advancement of Teaching, asserts, "The unique missions of the nation's universities and colleges--to act as a moral force, to discover and transmit knowledge and

larger meanings, to engage with integrity in the nation's service--must be preserved and strengthened."

SEE STRATEGY 17 BEGINNING ON PAGE 135.

* * * * *

FINANCING HIGHER EDUCATION

There are two fundamental questions which must be addressed when discussing the financing of postsecondary education: How much (if any) subsidy is justified for the financial support of postsecondary institutions? How should the finance burden be allocated among students; federal, state and local governments; and other interested parties? These questions are usually asked in the context of how scarce resources should be allocated in the economy--efficiency; and who should receive them--equity. The concept of efficiency is more than simply producing a good or service at lowest cost. An efficient allocation of resources occurs when the total benefits from the production of some good or service exceed by as much as possible the total cost of producing it. Equity, although a more subjective concept than efficiency, generally reflects a concern with the distribution of income in society.

According to information provided by the American Association of State Colleges and Universities, state support of public education is declining in terms of constant dollars per student. The national inflation-recession cycle beginning around 1970, and the energy crisis, has hit

higher education especially hard. State budgets reflect that higher education may be getting the "leftovers" in the state appropriation process. Many states have made up deficits by forcing colleges to raise tuitions, place limits on enrollments, or cut back on essential services.

An interesting commentary of the current state of financing higher education is found on the front page of a recent edition of The Chronicle of Higher Education. The headline "Students' Costs Will Rise 7 pct., Nearly Twice the Inflation Rate" lies juxtaposed with "Public Colleges Show Big Gains in State Funds." The College Board, in their study of tuition costs, noted that tuition and fees have raised 9 percent in one year at public four-year colleges and universities. The tuition and fees at private four-year institutions increased by 8 percent, and public two-year colleges are seeing a 7 percent increase. As a result, tuition policies are becoming the subject of heated debate in many states between lawmakers, college officials, and students. The major theme of debate rests with what share of cost should be paid by students and what share should be paid by the taxpayers.

In spite of increased tuition costs, several industrial states which had held down appropriations during the recent economic recession are now providing generous increases to public colleges and universities. Also, public colleges and universities in other areas of the nation are making major efforts to promote higher education and increase funding. Many of the appropriations increases reflect a desire on the state's part to compensate for insufficient appropriations during the past years. A legislator of the Oregon House of Representatives expressed the motives

of his state quite clearly when he said, "It's really a matter of throwing a few dollars into a kitty we've been robbing for six years."

A new movement is emerging which will further complicate the allocation of funds for higher education. There has been a marked expansion of fund-raising activities by public colleges and universities. This traditionally has been the domain of the private sector. John Phillips, President of the National Association of Independent Colleges and Universities, states, "'Gentlemen's agreements' that private institutions wouldn't seek public support and public institutions won't seek broad-based private support have been fractured by both sides, because the federal government has put everybody on short rations and institutions are trying to find alternative sources of funds." This increased competition for limited resources is creating new strains between independent and public institutions. The Association of Governing Boards of Universities and Colleges has recently noted that declining enrollments, budget constraints, and unfavorable tax policies have created a climate which can sharpen the rivalry between the two competing sectors.

This brief narrative provides just a sampling of policy issues concerning the financing of higher education which confront decision-makers in the 1980s. Other policy issues, many of which are interrelated, include differential tuition between community colleges and four-year institutions; subsidy of out-of-state students; the question of who benefits more from postsecondary education, society or the student; and the ever-increasing student debt. How, and if, states address these

issues affects virtually every aspect, either negatively or positively, of the educational enterprise.

SEE STRATEGY 18 BEGINNING ON PAGE 138, STRATEGY 21 BEGINNING ON PAGE 146, STRATEGY 23 BEGINNING ON PAGE 150, STRATEGY 24 BEGINNING ON PAGE 152, AND STRATEGY 25 BEGINNING ON PAGE 154.

* * * * *

DISTANCE DELIVERY OF INSTRUCTION

Postsecondary education may be in the midst of a technology revolution, which began as a grass roots movement. Providing instructional services by using a variety of information technologies to students who cannot, or choose not to, attend classes on a campus is inexorably becoming an integral part of the curriculums of colleges and universities throughout the nation. Two mutually complementary phenomena are occurring almost simultaneously which tend to accelerate the information technology movement. There have been rapid advances, and uses, of a variety of technologies which include cable TV, satellites, microwave, computers, microcomputers, videodiscs, video cassettes, computer graphics, and electronic mail. At the same time, there is a growing population of adults who are committed to continuing their pursuit of postsecondary education, whose circumstances preclude a traditional course of study, and who regard education as a way to enrich the present and prepare for the future.

Many colleges and universities are responding to the "non-traditional" student by providing instruction off-campus through several media. A recent survey by the Western Interstate Commission for Higher Education (WICHE) and the Pacific Mountain Network of 575 public and private postsecondary institutions in the 13-state western region provides empirical evidence of the extent to which information technologies are being used by colleges and universities and the problems relating to their effort. Much of the remainder of this narrative highlights the findings of the survey.

Educators in the western states are using several modes of information technologies for instructional purposes. Even though they have a full menu of sophisticated instructional technologies available to them, most of the use of these technologies is for on-campus instruction. The most prevalent media for off-campus instruction are one-way cable television, which is used by 17 percent of the institutions, and public broadcast television, which is used by 24 percent of the colleges and universities. Among the interactive video technologies, one-way video teleconferencing (with two-way audio) is used by only 3 percent for off-campus instruction. Moreover, only 10 percent of the institutions use audio teleconferencing for their off-campus curriculum.

Among the obstacles mentioned to the effective use of information technologies, by far the most formidable obstacle was inadequate financial resources to obtain necessary hardware and courseware. Ninety-five percent of the responding institutions saw this as their most pressing need. Other obstacles included the failure of the incentive and

reward system in encouraging faculty to get involved with information technologies, lack of adequate courseware and lack of adequate courseware evaluation information, and faculty resistance to audio and video technologies.

An encouraging inference throughout the report suggests that the more faculty become involved with information technologies the less their resistance. Another encouraging sign is that 67 percent of the responding institutions reported that they have created task forces or study groups to assess policy and plans regarding information technologies. As a corollary, to the survey question about future plans, the second most frequent reply from respondents was that they intend to use technology to expand their outreach efforts.

Good intentions, however, cannot come to fruition without the necessary resources. As suggested earlier, traditional budgetary practices at most institutions make it difficult to obtain funds for large up-front capital investments; the problem is complicated further when the item purchased may be obsolete within a few years. At many institutions information technology budgets are growing at the expense of other programmatic areas. Also, it is becoming clear that institutions are unlikely to successfully integrate information technologies unless they give the faculty incentive and reward system a great deal more attention. The report states:

> "In view of the extra faculty time that is inevitably required to make effective instructional use of computer, audio, or video technologies, colleges are unlikely to realize the potential of their investments in technology unless they provide their

> faculty with appropriate incentives and rewards. It is unrealistic to expect that by merely making faculty technology literate an institution has done what is necessary to adapt to the demands of information society. As long as teaching and the development of new approaches to instruction are not sufficiently valued, or at least under rewarded, instructional applications of information technologies are unlikely to extend far beyond those faculty who are predisposed to technology."

The nature of the relationship between colleges and state agencies is likely to change as more instruction is delivered by technological systems that transcend traditional instruction and state boundaries. When large-scale delivery systems become more common, colleges will need to cooperatively manage such resources to the satisifaction of all interested parties. Alternatively, state agencies may be urged to become more involved in such coordination. Likewise, relationships between state agencies and private institutions are apt to become more complicated as independent colleges and universities become more involved with delivery systems that cross state boundaries and the states get more involved in coordinating statewide delivery systems.

Information technologies make time and place less important, and the appropriateness of traditional measures of instructional activity (e.g., student-teacher contact hours, residency) will be further complicated. This situation is likely to put increasing pressure on state policy-makers and institutions to focus on measures of learning outcomes as a basis for the allocation of funds. Moreover, one of the more difficult problems for individual colleges to address is the lack of courseware available that meets their academic needs and standards. More than 80 percent of the respondents cite the cost of developing computer or video

courseware as prohibitive, thus shying away from course development unless assistance from outside funding resources is provided.

In sum, even though the use of information technologies is only one thread in the complex fabric of higher education, the survey results suggest that this is an area that poses some special problems for colleges and universities. The most difficult problem is that of integrating into a college information technologies which are not only expensive but require time for faculty to make effective use of them.

SEE STRATEGY 19 BEGINNING ON PAGE 141.

* * * * *

STUDENT INDEBTEDNESS

The costs of obtaining a college education are increasing at an alarming rate. According to a College Board report, the cost of going to college is rising at nearly twice the estimated rate of inflation. Reviewing costs for 1985-86, the Board reported that tuition and fees at public four-year colleges and universities is up nine percent over 1984-85, and at private four-year institutions the increase is eight percent.

The day has already arrived when the vast majority of students seek and receive financial assistance of one form or another. As the competition for scholarships and grants increases and as the costs continue to escalate, more and more college students are turning to student loans as

the only means of financing their education. This is especially true for those students coming from families with middle incomes or above.

The result of these trends in higher education is that students are incurring larger and larger debts in their pursuit of a college degree. Annual tuition costs already have risen to $6,000 and more in most of our nation's private institutions. The tuition at the elite private institutions is now five figures; Stanford's tuition is $11,100 and the tuition at the Massachusetts Institute of Technology is $11,000. Bennington College, purported to be the most expensive college in the nation, advertises a current tuition cost of $12,830. It is emphasized that these are tuition costs only. They do not include lab or special fees, room, board, books, or personal expenses. Multiplying these costs by the four, five, or six years it requires to complete degrees, and allowing for modest inflation to continue, it is evident that an undergraduate degree from a leading private college will cost a student well over $50,000.

There was a time when the answer to these financial constraints was to turn to the public state college or university, but now these, too, charge substantial sums. The average annual college costs for students at public four-year institutions who will live in campus housing in 1985-86 is $5,314. Again, students will need a substantial amount of money to underwrite a four-year program.

There is considerable evidence to indicate that America is rapidly moving into a period when college graduates will have substantially mortgaged their futures in the search for increased knowledge and earning power. With vast numbers of these "mortgaged students" entering the working market, there will be increasing demands for higher starting salaries, and the salary/inflation spiral will be forced upward. The new graduate who sacrificed, borrowed, and worked through years of college in the hope of obtaining a good job, embarking upon a challenging career and pursuing the nice house, new car, sunny vacation dream that permeates daily life in America, may suddenly find that, along with the diploma that opens the doors to the future, comes a repayment booklet that financially restricts or closes off many hoped-for options. If this "mortgaged student" happens to choose another "mortgaged student" as a spouse, the situation can become even worse.

At one time, student loan defaults, both on a state and federal level, were quite common, but as the loan volumes have grown into the millions locally and billions nationally, collection efforts have improved and have been strengthened. A good example is provided by the U.S. Education Department who has begun warning former students who had defaulted on their student loans that the Internal Revenue Service will withhold their income tax refunds unless they begin settling up within 60 days. This will affect nearly a million people who have taken out Guaranteed Student Loans and National Direct Student Loans. The names of defaulters who do not arrange to begin repaying their debts within two months will be turned over to the IRS, which has been authorized by Congress to tap the tax refunds of loan defaulters for up to the total amount that is

outstanding. Even bankruptcy cannot de-obligate the student borrower from most loan programs. Loan collection has become an industry within itself with a number of private collection firms bidding for contracts to pursue the student defaulter.

No student should be misled into thinking that money borrowed for schooling will not have to be repaid. Student loans are legal debts as much as money borrowed for any other purpose. The difference is that repayment of the student loan usually does not begin until years in the future. It is very easy for a student to amass a large debt without realizing the impact this will have in a few years.

At present, no one has a solution to this college cost problem. More and more, the college degree is a requirement for entry into many professions. The fact is that a college education is very costly and will even be more costly in the future. Somehow the student must find a way to secure this education. A number of plans intended to reduce the financial impact on the student have been suggested in recent years. Massive increases in federal grant assistance, extending student loan repayment schedules over 20 or 25 years, offering repayment schedules that require low payments the first few years and then increasing larger payments as the borrower is supposedly better able to pay, making repayment of federal student loans federal income tax deductions, loans to parents on behalf of students, and federal assistance directly to the college and universities to defray operational costs have all been discussed as partial solutions. One solution, which will certainly limit student indebtedness to the federal government, discussed by William J.

Bennett, the Secretary of Education, is to reduce spending for programs such as student aid. His proposal, however, has faced stiff opposition from Congress.

Until a satisfactory answer is found, America will see increasing indebtedness, more part-time students, more interrupted attendance, and more student loan defaults. Efforts must be made to ensure that these pressures do not result in limiting access to our nation's educational resources. Sufficient loan funds must be made available to assist the students who cannot personally underwrite their education. However, along with the necessity for loan availability comes an even greater responsibility to administer the loan programs equitably. The prospective borrower must be made fully aware of the obligation being made when a student loan is accepted. It may provide access today, but tomorrow it must be repaid, and it will certainly restrict options and plans in the future.

SEE STRATEGY 25 BEGINNING ON PAGE 154.

* * * * *

CHAPTER IV

The Goals of the Statewide Plan

The purpose of this master plan is the attainment, to the fullest extent possible, of the four major goals relating to postsecondary education. The planning goals for postsecondary education are to:

PROMOTE EXCELLENCE to improve educational service;
ENHANCE ACCOUNTABILITY of the educational process;
FOSTER EFFICIENCY within the educational enterprise; and
IMPROVE ACCESS to accommodate those citizens who desire postsecondary education.

The following is a brief description and overview of each of the goals.

PROMOTE EXCELLENCE TO IMPROVE EDUCATIONAL SERVICE.

During the past few years, the Commission has addressed the issue of excellence in terms of assessing institutional outcomes. The Commission asserts that excellence in postsecondary education requires that institutions produce demonstrable improvements in student knowledge, capacities, skills, and attitudes. This approach emphasizes the intellectual and personal growth of individual students and stresses that the quality of an educational program should be measured by the contribution it makes to the learning and

development of the student. Thus, an institution of high quality is one that facilitates the maximum growth among its students and is able to document that growth through appropriate assessment procedures. In addition, research and public service activities should be evaluated according to their contribution to society.

It is fitting that the defense of excellence by John Gardner be included here as a supporting framework for this plan.*

> "Though we must make enormous concessions to individual differences in aptitude, we may properly expect that every form of education be such as to stretch the individual to the utmost of his potentialities . . . we must recognize that there may be excellence or shoddiness in every line of human endeavor. We must learn to honor excellence (indeed to demand it) in every socially accepted human activity, however humble the activity, and to scorn shoddiness, however exalted the activity.
>
> An excellent plumber is infinitely more admirable than an incompetent philosopher. The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water."

ENHANCE ACCOUNTABILITY OF THE EDUCATIONAL PROCESS.

Accountability refers to the obligation of an institution to be answerable to its constituency. Accountability pertains to an institution's responsibility for producing results. It implies a moral or contractual commitment to the student and connotes an open and trusting relationship between the institution and those being served.

---

* Robert A. Wilson (ed.), Survival in the 1980's: Quality, Mission, and Financing Options, Center for the Study of Higher Education, University of Arizona, Tucson, 1983, p. 59.

The notion of accountability has a strong relationship to assessment of educational, research, and public service outcomes because there is no way for postsecondary education to become properly accountable without knowledge of the overall results from institutional effort. Although institutions may perform multiple functions, financial decisions by students and/or the State cannot be made without regard to what the dollars are buying. If no solid evidence of outcomes is available, decisions will be based on impressions, anecdotes, or faith.

FOSTER EFFICIENCY WITHIN THE EDUCATIONAL ENTERPRISE.

The criterion of efficiency, in a broad sense, suggests that an institution utilize the cheapest means toward the attainment of its desired goals. More narrowly and appropriately defined, the degree of efficiency in all human undertaking is discovered by comparing means and ends. The greater the ends achieved with given means, or the fewer the means used to achieve given ends, the greater the efficiency. Put simply, efficiency is the ratio between means and ends.

Howard Bowen identifies two frequent errors which are committed when discussing efficiency in higher education.*

> "The first, common to critics of higher education, is to judge efficiency only in relationship to cost. It is assumed that an institution that can educate a student for $2,000 a year is more efficient than one which spends $3,000 per student. Clearly the question of which is more efficient can be answered only when something is known

* Howard R. Bowen, The Costs of Higher Education, Jossey-Bass Publishers, San Francisco, 1980, pp. 230-231.

about the outcomes. The second error, common to the proponents of higher education, is to judge efficiency only in relation to outcomes. It is assumed that improved outcomes are desirable regardless of cost. Both of these approaches fail to recognize that efficiency is a relationship between two variables, cost and outcomes."

Bowen goes on to say "the statement that institutions differ widely in their efficiency means not merely that they differ in their costs, or that they differ in their outcomes, but rather that they differ in their ratio of their outcomes to their costs. A high-cost institution may be very efficient if it is producing commensurate outcomes; and a low-cost institution may be very inefficient if its outcomes are negligible or even negative."

IMPROVE ACCESS TO ACCOMMODATE THOSE CITIZENS WHO DESIRE POSTSECONDARY EDUCATION.

It is the responsibility of the State to make postsecondary education as accessible as possible to all segments of society. Striving to improve access in light of declining revenues is a major challenge now facing the State.

In general, access refers to the opportunity for the citizens of Alaska to participate in postsecondary education. The notion of access relates to myriad activities within the postsecondary enterprise. Methods of educational delivery, whether they be through classroom lecture, telecommunications, computers, correspondence, or lab demonstration, affect access. Access refers to the type and variety of courses and programs offered at a particular program location. It relates to the ability of students to take courses that they need and to be able to complete programs in a reasonable amount

of time. Access also suggests that appropriate support services be provided to those students who are either academically, culturally, or physically disadvantaged. In sum, access relates to that realm of services provided by the postsecondary education community which increases participation by the citizens of the State.

CHAPTER V

Strategies

The following strategies are grouped according to the goal each promotes. It should be noted that some of the strategies contribute to more than one goal. For convenience, however, the strategies are associated with the goal with which they have the strongest relationship.

The goals, which were discussed in Chapter IV, are to:

PROMOTE EXCELLENCE to improve educational service;

ENHANCE ACCOUNTABILITY of the educational process;

FOSTER EFFICIENCY within the educational enterprise; and

IMPROVE ACCESS to accommodate those citizens who desire postsecondary education.

GOAL: PROMOTE EXCELLENCE to improve educational service.

STRATEGY 1. THE UNIVERSITIES AND COLLEGES ARE URGED TO DEVELOP ASSESSMENT PROGRAMS TO MEASURE THE IMPACT OF THEIR CURRICULUM AND INSTRUCTION ON STUDENT LEARNING.

This recommendation has been a major concern of the Commission for several years. Implicit in the recommendation is the suggestion that any institution of quality continuously and rigorously evaluates its effectiveness. That evaluation must encompass two basic questions: (1) How well does the institution educate students?, and (2) What practices influence the institution's ability to do so? Moreover, it is appropriate that constituents of higher education be provided evidence that demonstrates student achievement, command of subject matter, and mastery of basic educational objectives.

Beginning around the turn of this decade, institutions of higher education in this country began to eschew traditional measures of quality which focused upon institutional resources such as endowments and expenditures, the breadth and depth of curricular offerings, the intellectual attainments of faculty, the test scores of entering students, and selectivity in admissions. These measures were abandoned because they simply do not measure excellence. None of them tells us what students actually learn or how much they grow as a result of their learning experiences, and none tells us anything about educational outcomes. As a result, we have no way of knowing how academic institutions actually perform.

It is, therefore, recommended that the University of Alaska adopt administrative procedures which facilitate a "value-added" approach to institutional assessment. This approach stresses student learning outcomes relative to student input potential, and provides the means by which an institution can focus on educational quality. As a concept, value-added refers to the positive differences that an educational experience contributes to a student's knowledge, attitudes, and skills. A value-added approach emphasizes the use of qualitative measurements to monitor student change and develops data which allows an institution to see how it's actions influence that change. According to Alexander Astin, the basic argument underlying the value-added approach is "that true quality resides in the institution's ability to affect its students favorably, to make a positive difference in their intellectual and personal development. The highest quality institutions, in this view, are those that have the greatest impact--add the most value--to the student's knowledge, personality, and career development."

There is movement to include outcomes measurement as a legitimate requirement for accreditation. In 1983, the Southern Association of Colleges and Schools proposed to its members that institutions be required to evaluate student learning systematically and measure appropriate outcomes of the education process. This represents a significant change from the "process-oriented" criteria that historically dominate institutional accrediting procedures. While the proposal was not adopted, the accrediting community is continuing to debate the appropriate use of outcomes measurement in the accreditation process.

The Commission realizes that implementation of such an evaluation method requires the cooperation and enthusiasm of all segments of the university community. It is also recognized that establishment of a value-added approach to institutional assessment will take several years to implement. It is because of these two notions that the Commission emphasizes that it is now time to begin. As expressed recently by the Southern Regional Education Board: "Today, there is interest in a new form of accountability for higher education--accountability on the basis of the demonstrated achievement of students, not just on financial criteria; and quality judgments on the basis of student academic success, not just on the basis of selectivity."*

An excellent resource to aid in the development of assessing student outcomes is found in a document entitled In Pursuit of Degrees with Integrity, A Value-Added Approach to Undergraduate Assessment, published by the American Association of State Colleges and Universities. This publication describes the value-added program at Northeast Missouri State University, which was awarded the 1983 G. Theodore Mitau award for innovation and excellence in state colleges and universities. As explained in the forward by Allen W. Ostar, President of the American Association of State Colleges and Universities (AASCU),

> ". . . since the early days of the academic affairs resource center, AASCU has explored many methods of program evaluation that could enhance the integrity of the baccalaureate degree. We are certain that the value-added approach holds much potential for the future development and evaluation of institutional programs at state colleges and universities. Our

* James R. Mingle, Measuring the Educational Achievement of Undergraduates: State and National Developments, State Higher Education Executive Officers, Denver, January 1985, p. 14.

AASCU institutions serve the public, and it is important for us to know whether we are fulfilling our institutional missions to provide high-quality educational experiences for the diversity of students we serve."

* * * * *

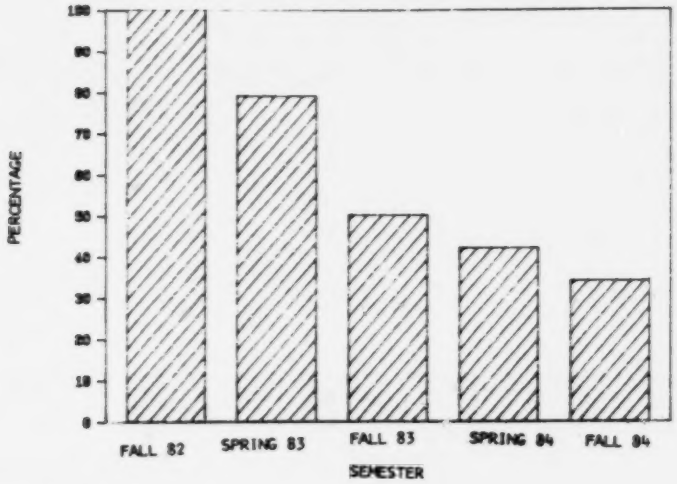
STRATEGY 2. THE COMMISSION ENCOURAGES THE UNIVERSITY OF ALASKA AND OTHER INSTITUTIONS TO STUDY FURTHER THE RETENTION AND PROGRESSION PATTERNS OF THE ENTERING FULL-TIME STUDENTS.

Recently, the University of Alaska performed a student retention and progression study at the University of Alaska, Anchorage, Fairbanks, and Juneau. The study followed the progress of full-time students enrolled for the first time in the fall of 1982. The reason for selecting a cohort of full-time, first-time students enrolled in a degree program was that they, by virtue of their enrollment, expressed a commitment to definable objectives. Specifically, they were committed to full-time study and obtaining a degree.

At the University of Alaska, Fairbanks (UAF), a 1982 fall semester full-time cohort group of 591 first-time freshmen was identified. Of those students, 465 (79%) again enrolled in the spring of 1983; 296 (50%) in the fall of 1983; 251 (42%) in the spring of 1984; and 200 (34%) enrolled within the first three weeks of the fall semester of 1984. Thus, after two years, the original cohort of first-time freshmen enrolled as full-time students in the fall of 1982 was reduced by approximately two-thirds. Thus, the retention rate of the traditional, full-time student after two years at UAF is about 34 percent. (See Figure 3 on next page.)

FIGURE 3

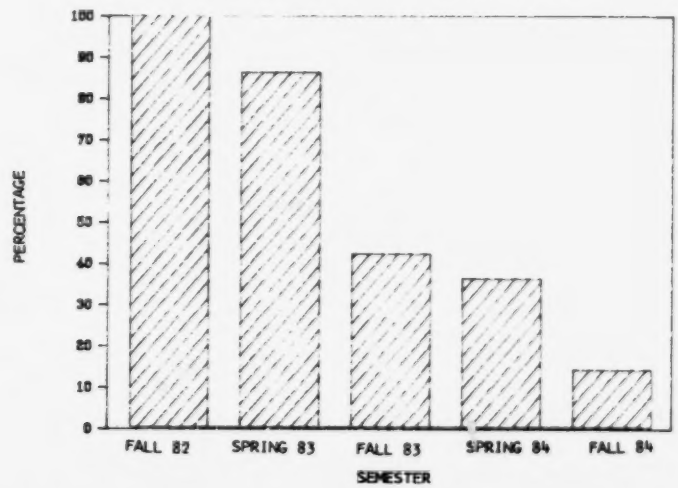
UAF STUDENT RETENTION



At the University of Alaska, Anchorage (UAA), a 1982 fall semester full-time cohort group of 221 first-time freshmen was identified. As illustrated in Figure 4, of those students, 189 (86%) again enrolled in the spring of 1983; 92 (42%) in the fall of 1983; 80 (36%) in the spring of 1984; and 32 (14%) enrolled within the first three weeks of the fall semester of 1984. After two years, the original cohort of first-time freshmen enrolled as full-time students in the fall of 1982 was reduced by almost 86 percent. Hence, the retention rate of the traditional, full-time student after two years at UAA is about 14 percent.

FIGURE 4

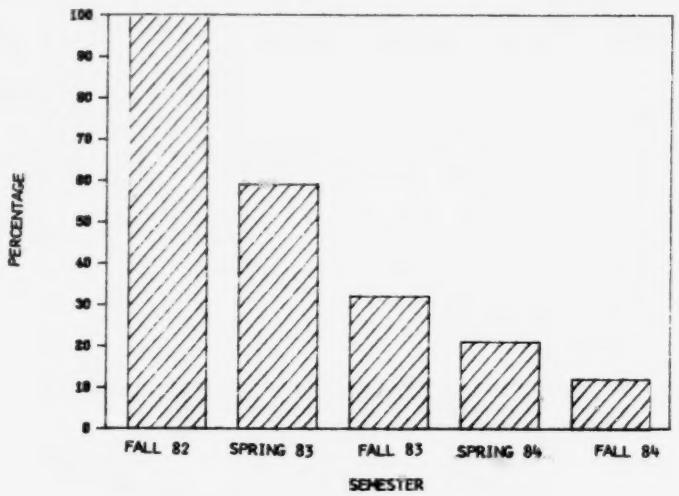
UAA STUDENT RETENTION



As noted in Figure 5, at the University of Alaska, Juneau (UAJ), a 1982 fall semester full-time cohort group of 34 first-time freshmen was identified. Of those students, 20 (59%) again enrolled in the spring of 1983; 11 (32%) in the fall of 1983; 7 (21%) in the spring of 1984; and 4 (12%) enrolled within the first three weeks of the fall semester of 1984. After two years then, the original cohort of first-time freshmen enrolled as full-time students in the fall of 1982 was reduced by approximately 88 percent, thereby yielding a retention rate of the traditional, full-time student after two years at UAJ of about 12 percent.

FIGURE 5

UAJ STUDENT RETENTION



The University also collected data on full-time student progression. Progression refers to the rate at which an entering freshman earns enough hours of credit to achieve a higher class rank (sophomore, junior, senior). For instance, a student should have achieved sophomore status after the passage of one year and junior status after two years.

At the University of Alaska, Fairbanks, at the end of one year (fall 1983 semester), 123 (21%) of the original fall 1982 cohort of first-time freshmen had reached the level of sophomore, and 166 (28%) continued to enroll at the freshman level. At the end of two years (fall 1984 opening semester), 61 (10%) of the original fall 1982 cohort of first-time freshmen had reached the level of junior, 116 (20%) were still at the sophomore level, and 15 (3%) remained at the freshman level.

At the University of Alaska, Anchorage, at the end of one year (fall 1983 semester), 25 (11%) of the original fall 1982 cohort of first-time freshmen had reached the level of sophomore, and 66 (30%) continued to enroll at the freshman level. At the end of two years (fall 1984 opening semester), 9 (4%) of the original fall 1982 cohort of first-time freshmen had reached the level of junior, 17 (8%) were still at the sophomore level, and 5 (2%) remained at the freshman level.

The data collected for the University of Alaska, Juneau indicates that at the end of one year (fall 1983 semester), none of the original fall 1982 cohort of first-time freshmen had reached the level of sophomore and 10 (29%) continued to enroll at the freshman level. At the end of two years (fall 1984 opening semester), none of the original fall 1982 cohort of first-time freshmen had reached the level of junior, 3 (9%) were still at the sophomore level, and 1 (3%) remained as a freshman.

There has been a great deal of research on student retention. One large-scale national study, the National Longitudinal Study of High School Seniors (NLS), has been carried out under the sponsorship of the National Center for Education Statistics. This study is a long term

follow-up of the members of the high school graduating class of 1972, who are periodically surveyed. The results of this study show that 72 percent of the first-time full-time college students re-enrolled the second year at their original four-year institution and 56 percent re-enrolled for the third year. Studies conducted by the states of Maryland and New York show similar results. A recent study by the State of Tennessee shows lower retention rates than the national average, but higher than those of the University of Alaska.

Because it appears that the retention rate of students at the University of Alaska centers is low, both absolutely and in relation to other states, it is encumbent upon the University to rigorously analyze the reasons why this is occurring. An assessment of student retention enables the institution to continually evaluate its own performance. Tracking student retention provides valuable information concerning the quality of virtually all segments of the University. In particular, academic departments need to know what happens to their students. A systematic assessment of retention can affect an institution's standards, its teaching methods, the process of faculty selection, preparation, and evaluation and its student advising. Indeed, it can be a mark of the University's highest standard of self-assessment and self-improvement.

The data contained in this recommendation concerning retention should be considered preliminary in nature, and it would be inappropriate to draw conclusions or change policy at this point. All that is known for certain regarding the students who are no longer enrolled is that, for reasons which are not available now, their relationship with the institution has ceased. Again, a cautionary note, the reasons for

leaving the institution may be many, e.g., financial, academic, abandonment of original objectives, illness, desire to attend another institution, or any variety of personal and nonpersonal reasons. It is only through additional analysis that the University will be able to ascertain the causes of the low retention rate.

* * * * *

STRATEGY 3. THE RECENTLY ESTABLISHED ALASKA PRIVATE SCHOOL ASSOCIATION, INC. IS ENCOURAGED TO STRENGTHEN ITS MEMBERSHIP AND TO ADDRESS THE QUALITY OF THE PROPRIETARY EDUCATIONAL PROCESS.

In March, 1985, the Alaska Private School Association, Inc. was established. There are over 80 private proprietary schools in the State and they offer a variety of programs ranging from cosmetology to flight instruction to welding. These schools are an important part of the postsecondary educational community. Whereas the public and private colleges and universities have roles in instruction, research, and public service, the private proprietary schools contribute to the educational delivery system through instruction, manpower training, and skills development.

The Association has adopted six specific purposes. These are:

- To encourage quality educational and training programs in all member schools, for the benefit of all private school students and enabling them to develop and improve their capabilities.

•To upgrade the image of private schools in Alaska, and educate the public as to the availability and benefits of private education.

•To foster ethical practices and work to improve all private schools in Alaska, for the benefit of their students and the public.

•To hold workshops and seminars to encourage professional development for the benefit of private schools, their students, and the public.

•To provide an open channel of communication and liaison between private schools and business, industry, public schools, State and Federal agencies, and the State and Federal Legislatures, and to work with these entities for the improvement of private education in the State of Alaska.

•To take whatever action is necessary, proper, or advisable to effect the purposes for which this corporation is organized.

Several other states have similar organizations, and the Commission applauds this effort and looks forward to a cordial and productive working relationship. A major function of the Commission is "to provide for the protection, education, and welfare of the citizens of the State, its postsecondary institutions, and its students." In light of the recent spate of school closings and bankruptcies, this role obligates the Commission to be especially vigilant in its efforts to protect the student from being denied the opportunity to complete an instructional program after full payment for the program has been made. Although the

marketplace must be the prime determinant of the success and future of proprietary schools, fundamental consumer safeguards must be provided. Also, as the Association develops and matures, the Commission recommends that it address the following issues:

1. There is high potential for needless duplication of vocational courses and programs between the private proprietary schools and public community colleges. The Association should foster cooperation and coordination with the community colleges to eliminate as much program redundancy as possible.

2. To enhance the quality of the educational process of the private schools, the Association should encourage its members to seek national accreditation either through the National Association of Trade and Technical Schools (NATTS) or the Association of Independent Colleges and Schools (AICS).

3. Information about the students enrolling in the private schools is valuable both to the schools themselves and to the Commission. It is urged that the Association establish a systematic effort to collect appropriate data that will facilitate the educational process of the citizens of Alaska. The Commission stands ready to help in this effort.

4. The State Scholarship Loan Program is only available to full-time students. For private proprietary schools, the Commission defines a full-time student as "a student enrolled in

a career educational program for at least 30 clock hours per week." Since there is controversy concerning this definition, the Association should review the full-time student standard and make any recommendations for changes to the Commission.

* * * * *

STRATEGY 4. THE COLLEGES AND UNIVERSITIES IN THE STATE ARE ENCOURAGED TO CONTINUE COURSES, PROGRAMS, AND ACTIVITIES WHICH SERVE TO ENHANCE THE AWARENESS AND RESPECT OF ALL CULTURES.

As noted in the introduction, Alaska is a land of cultural and linguistic richness. The 1980 census clearly presents this impressive heterogeneity. In addition to a large number of American Indians, Eskimos and Aleuts, there is a significant portion of Asian and Pacific Islanders, which include Filipinos, Japanese, Chinese, Koreans, Asian Indians, Vietnamese, and Hawaiians (see Appendix B).

Since before statehood, Alaska citizens have distinguished themselves by maintaining a tradition of acceptance and respect for the cultures of others. This is reflected in our postsecondary education community. The colleges and universities in the State offer a number of programs and/or courses which promote cultural awareness both within the State and internationally. Appropriately, there is a particular emphasis on the language and culture of the Pacific Rim. While the University of Alaska, Fairbanks and Alaska Pacific University offer multi-cultural academic programs, courses abound on every campus. The following are just a few examples of courses which can be enjoyed by Alaskan residents:

Natives of Alaska
Studies in Spanish Literature
Transcultural Nursing
Beginning Athabaskan-Kuyukon
Alaska Native Languages
Introduction to Tuma Theatre
Native American Religion & Philosophy
Knowledge of Native Elders
Native Art of Alaska
Cultural Influences in Education
Yup'ik Eskimo
Inupiaq Eskimo
French
German
Japanese
Russian
Spanish
Northwest Indian Art
Studies in Canadian Literature
The Art of Skin Sewing
20th Century Russia
East Asian Civilization
Black History
Modern China
Modern Japan
History of American Indians
Alaska Native Politics
Haida
Tlingit
Oral and Written Literature for the Crosscultural Classroom
Native Crafts
Literature of the North
Alaskan Folklore

Higher education in Alaska should and does assert leadership in this very important area. It is vital that the postsecondary institutions continue to strengthen and reinforce the legacy of understanding and respect for the heritage and customs of other people both within the State and throughout the world.

GOAL: ENHANCE ACCOUNTABILITY of the educational process.

STRATEGY 5. THE UNIVERSITY OF ALASKA SHOULD DEVELOP GUIDELINES FOR THE ADDITION OF FACULTY AND STAFF AND USE THESE GUIDELINES IN ITS BUDGET REQUEST TO THE LEGISLATURE AND THE GOVERNOR, AND ARE CONSISTENT WITH THE STRATEGIES OF THIS PLAN.

The University of Alaska, like all institutions of higher education, is labor intensive; a very high percentage of the University's budget is for personal services. Faculty salaries and benefits comprise the largest single part of the budget and, because of tenure and other contractual arrangements, the financial impact of staffing decisions can be felt for years. Thus, it is crucial that decisions concerning the addition of personnel be made in a systematic and judicious manner. This is particularly acute in light of the declining general fund revenue that the State is now experiencing.

The University's budget request should provide appropriate justification for the addition of new staff. Although other criteria may be considered, a primary rationale for staff additions should be based upon cost effectiveness and improvement of the educational process. An *a priori* development of appropriate standards or guidelines will help to assure that staff additions are not based upon judgments which are inconsistent with sound management principles and established educational standards.

It is reasonable to assume that there will be varying standards for the university centers and for the community colleges, and also different standards for various disciplines and course levels. The Commission stands ready to aid the University in any way possible to develop appropriate standards for the addition of new personnel, but the task, by its nature, must lie squarely with the University. It should also be noted that, once new staff are awarded, it is and should be the University's responsibility to allocate all staff according to the needs of the institution.

Such standards or guidelines can take several forms. For purposes of example only, the following are representative of standards used by other states. The Arkansas Department of Higher Education has established guidelines which indicate the number of student credit hours (SCH) that should be produced by faculty by discipline and course level. Table 1, on the next page, illustrates an example of the standards used in Arkansas.

TABLE 1

STANDARDS FOR THE
GENERATION OF STUDENT
CREDIT HOURS PER FTE FACULTY

	Lower Level	Upper Level	Masters/ Specialist/ 1st Professional	Doctoral
Agriculture and Natural Resources	720	648	288	144
Architecture and Environmental Design	600	480	288	---
Area Studies	---	360	---	---
Biological Sciences	720	480	180	144
Business Management	720	648	288	144
Communication	450	360	126	---
Computer and Information Services	720	480	288	144
Education	600	480	288	144
Engineering	450	360	126	144
Fine and Applied Arts	450	240	126	144
Foreign Languages	450	240	126	144
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.

In Colorado, the procedure for the allocation of faculty is based upon student/faculty ratios by discipline and course level as shown in Table 2 on the next page.

TABLE 2

STUDENT/FACULTY RATIO GUIDELINES
FOR THE ALLOCATION OF FTE FACULTY

Discipline	Student/Faculty Ratios			
	Lower	Upper	Grad 1	Grad 2
Agriculture and Natural Resources	24	15	8	6
Architecture and Environmental Design	20	15	11	7
Area Studies	30	22	11	7
Biological Sciences	25	15	8	6
Business Management	26	22	12	10
Communication	21	17	12	10
Computer and Information Services	22	12	8	6
Education	22	22	12	10
Engineering	19	13	8	7
Fine and Applied Arts	15	10	8	7
Foreign Languages	19	10	9	7
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.

After the determination of FTE faculty is made, other guidelines for staff can be developed. For instance, the State of Oregon uses a ratio of one FTE for each five FTE faculty for clerical support and one FTE for each twelve FTE faculty for technical support.

Although there is little guidance from standards for developing institutions, the university should develop guidelines which acknowledge a minimum number of faculty necessary to be a viable institution. However, for most of the institutions within the University system, guidelines can be determined and should be maintained to assure an efficient allocation of resources. Moreover, the guidelines can help to

assure a public that is concerned about the expenditure of state monies that the University is acting in a reasonable and prudent manner.

* * * * *

STRATEGY 6. THE COMMISSION IS IN STRONG AGREEMENT WITH THE REPORT SUBMITTED TO THE ALASKA STATE LEGISLATURE FROM THE RURAL EDUCATION TASK FORCE AND ENCOURAGES THE UNIVERSITY TO TAKE IMMEDIATE ACTION IN DEVELOPING A COMPREHENSIVE PLAN FOR POSTSECONDARY EDUCATION SERVICES FOR RURAL/NATIVE ALASKANS.

The Rural Education Task Force, in response to the Bush Caucus of the 1984 Alaska State Legislature, was asked to "develop a single plan for postsecondary education services to rural Alaska that is efficient, effective, and mutually acceptable to recipients, providers and funding agencies." The Task Force, after receiving considerable public participation, identified several recommendations regarding distance-delivered postsecondary education services to rural/Alaska Native residents. The complete report is contained in Appendix C in Volume II, but following is a brief summary of the report's recommendations.

Recommendation 1. The University of Alaska should take immediate steps to begin developing a comprehensive plan for postsecondary education services for rural/Native Alaskans.

Recommendation 2. The planning process should involve the Alaska Federation of Natives and other representatives of rural/Alaska Native constituent groups.

Recommendation 3. The plan should address and/or include:

a. locally delivered courses to residents in the rural communities;
b. external degree programs in education, health sciences, social services, business administration/management, land and natural resources development and management, vocational/technical training, and leadership training;
c. flexibility of instructional systems;
d. career counseling and academic advisement services for distance learners;
e. both short term and long term education/training needs of the community/region;
f. localized curriculum;
g. academic excellence that guarantees articulation and transferability of credit, particularly among the University of Alaska units; and
h. the establishment of permanent counseling services.

Recommendation 4. Learning centers in villages should be established in order to provide a quiet place to study, a meeting place for audio-conferenced courses, and access to resource and reference materials.

Recommendation 5. The University of Alaska should clarify and formulate the specific role of policy advisory councils, providing an avenue for local involvement in planning, implementation, evaluation and feedback from consumer groups.

Recommendation 6. Close alignment of the Cooperative Extension Service (CES) should be established with rural postsecondary credit course delivery.

Recommendation 7. Curriculum must be relevant to the needs of the participants and the areas in which they work and live. The overarching goal is to provide the opportunity for individual and community social and economic well-being through education that results in improved employment opportunities.

Recommendation 8. Given the magnitude of the project to plan, develop, implement, and evaluate a distance-delivered external degree program responsive to the identified needs of the service area, a pilot project of defined scope should be established.

Recommendation 9. Special funding is recommended for a variety of projects and activities, which include a pilot project for locally delivered services, teacher orientation, a research project to establish a data base on Alaska Native student participation and achievement in secondary and postsecondary education, and the establishment of honors institutes at the four-year campuses of the University of Alaska.

The Commission also echoes the enthusiastic endorsement by the Task Force of the Cross-Cultural Orientation Program (X-COP) for teachers, which is currently offered by the University of Alaska, Fairbanks. The year-long program has been preparing both teachers and administrators for schools in rural Alaska. It is designed to increase the effectiveness of those

working in rural schools. The courses are adapted for practicing teachers in a field setting, with numerous applied activities and projects as well as clinical supervision by the teaching faculty. As the report emphasizes, "the program has been successful in addressing cross-cultural teaching strategies and teacher performances in the rural classroom and has shown that participants have a lower attrition rate than non-participants."

* * * * *

STRATEGY 7. WITH ATTENTION TO THE MISSION OF EACH OF THE UNIVERSITY CENTERS AND OTHER STRATEGIES WITHIN THIS PLAN, THE UNIVERSITY OF ALASKA SHOULD CONTINUE TO ASSESS THE RELATIONSHIP OF RESEARCH TO INSTRUCTION AND PUBLIC SERVICE.

Research is an activity closely related to progress in all fields of intellectual endeavor. It is a necessary ingredient to the discovery of new knowledge and the application of existing knowledge to new situations. Research, appropriately, takes its place alongside teaching and public service as an important activity in higher education. Although each University center should be involved in research to some degree, the level and scope of involvement can and should differ depending upon the distinct characteristics of the mission of each center.

University of Alaska policy provides for differing research emphases not only between campuses but also within a campus. Sections 04.01.16(B) of the University policy concerning performance standards of faculty contains the following statement:

"The performance standards stated above, and in the Regulations which accompany this Policy, speak only to the universally accepted indicators of faculty evaluation: teaching, research, and public and university service. It should, nevertheless, be understood that a faculty member has professional responsibilities and obligations that go beyond teaching, research, and public service (such, for example, as continuing professional development); and that those "other" responsibilities and obligations are also subject to comment and evaluation. This policy does not mean that all three areas (teaching, research and public service) must appear in each year of university service. Nor does it require that candidates for promotion be equally proficient in, or equally engaged in, teaching, research, and public service in every year of their university service. (emphasis added)

In light of the economic circumstances now facing Alaska, the University of Alaska, in cooperation with the Legislature and Governor's office and with attention to other strategies within this plan, should come to agreement on how much the State should support research at each campus. This is becoming particularly acute as the demand for instructional services continues to increase. The following are some of the questions that should be addressed.

1. What is the appropriate level and scope of research for each University center?
2. Does the research effort at each campus support and uphold the institution's mission?
3. Regardless of the emphasis placed upon the research at a particular campus, how can the workloads of individual faculty members be modified depending upon their particular strengths and the educational requirements of the campus?

Traditionally, the University has concentrated on problems and phenomena of the Arctic and sub-Arctic regions. In doing so, the University is

maintaining links with institutions and laboratories in several countries within the same latitude area. Also, scholarly works that relate to the Pacific Rim are becoming increasingly important. The University has a distinguished record of research contributions and has achieved both national and international recognition.

This recommendation is not intended to discourage or inhibit those research contributions that continue to enhance the University's reputation beyond State boundaries. As a matter of public policy, however, it is advisable to maintain an appropriate balance between instruction, research, and public service.

GOAL: FOSTER EFFICIENCY within the educational enterprise.

STRATEGY 8. THE UNIVERSITY OF ALASKA SHOULD INSTITUTE A COMMON COURSE NUMBERING SYSTEM TO FACILITATE THE AUTOMATIC TRANSFER OF CREDITS FOR EQUIVALENT COURSES AMONG THE UNITS AND, IN PARTICULAR, BETWEEN THE COMMUNITY COLLEGES AND THE FOUR-YEAR INSTITUTIONS.

The transfer of credit by students from one unit of the University to another has continued to be problematic. Of particular note, difficulties persist for students attempting to transfer from the community colleges to the four-year institutions within the University of Alaska system.

The four-year institutions of the University of Alaska will accept all course transfer credit at the 100 level and above from the University of Alaska community colleges and rural education centers for students with a grade point average (GPA) of 2.0 and above. Course credit applicability toward a particular degree program, however, is determined by the receiving University of Alaska unit. It is the assigning of courses toward the major by the receiving unit which has forced transfer students to either repeat courses or enroll in additional courses which have similar content to courses they have already completed. The result is that many students must enroll for additional semesters to complete graduation requirements.

In response to these circumstances, the Commission, at the direction of the Alaska State Legislature and with the cooperation of the University and other independent colleges and universities, developed the Alaska Transfer Guide in 1982. The Guide is designed to help students in transferring from two-year programs into four-year programs within the State. Students and counselors use the Guide for determining if and how any courses offered in an Alaskan two-year institution will transfer to a four-year Alaskan institution. The Guide is intended to serve as a tool of the consumer of postsecondary education. It does not attempt to imply what should or should not transfer from one institution to another, or what should or should not apply as an elective credit or major degree credit in a transfer action. The Guide simply reports what does or does not transfer and, if it does, how it transfers from one institution to another.

In spite of these efforts, transfer problems continue to exist. Therefore, the Commission recommends that the University of Alaska establish a common course numbering system to facilitate the automatic transfer of credits for equivalent courses among the University of Alaska units.

The State of Florida experienced similar difficulties concerning the transfer of credits between its 28 community colleges, which are under the auspices of the Community College Coordinating Board, and the nine public senior institutions governed by the Board of Regents. Both systems together enroll about 350,000 students. In response to this problem, the Florida Legislature in the early 1970's provided for the establishment of a statewide course numbering system (see legislation in

Appendix D in Volume II). The system was established at the University and the community colleges in the mid 1970's. It is now used at all public institutions of higher education in Florida.

The course numbering system:*

- Provides a framework for each subject-matter area to categorize courses. The same framework is used by all institutions.
- Places responsibility of determining course equivalencies with faculty at the universities and community colleges who would make their decisions based upon detailed course descriptions or syllabi.
- Establishes course inventories listing all courses offered at universities and community colleges and identifies equivalent courses.
- Develops statewide course descriptions, or course-equivalency profiles, to be used in determining equivalencies.

In 1983, there were over 55,000 courses on file for the community colleges and universities in Florida.

The advantages of such a system are manifold. Because all public institutions of higher education would use the same course numbering system, the evaluation of students' transcripts would be easier than in the past. Automatically transferable courses can be identified instantly. Of extreme importance, the rule of automatic transferability of courses which are deemed equivalent by faculty committees would reduce for many transfer students the time required to complete a degree. This means substantial savings for the students and the state.

* Florida Statewide Course Numbering System: An Overview, Florida Department of Education, Tallahassee, June 1984.

Because course inventories are statewide, the counseling process can become more efficient and effective. Also, since all courses and course descriptions would be on file, instructors who plan new courses can request copies of descriptions of existing courses.

It is logical to assume that the University of Alaska could establish such a common number system with comparative ease. Unlike Florida, which had to accommodate two distinct governing systems with 37 institutions, the University of Alaska is one system with 14 major campuses and several rural education centers. Also, the University of Alaska has signficantly fewer different course offerings than the institutions in Florida.

Realizing that this effort will be beneficial to the citizens of Alaska, the Commission stands ready to aid the University when it decides to implement such a program.

* * * * *

STRATEGY 9. IN LIGHT OF DECLINING STATE REVENUES, THE SUMMER SESSION PROGRAMS AT THE UNIVERSITY OF ALASKA CAMPUSES SHOULD BE ADMINISTERED SO THAT DIRECT TEACHING COSTS ARE NOT EXCESSIVE RELATIVE TO REVENUES.

All of the university centers and community colleges of the University of Alaska system conduct summer session programs. In general, teachers employed in the summer are recruited from three basic sources: (1) full-time faculty employed under a nine-month contract, (2) full-time

faculty and administrators under a 12-month contract, and (3) persons in the community who have particular expertise in academic areas. The salary for faculty possessing a nine-month contract who teach in the summer is 1/27 of their full-time salary per credit hour. For instance, a faculty member whose salary for nine months is $45,000 receives $5,000 for teaching a three-credit course in the summer. Community college faculty receive a flat rate of $1,000 per credit hour for teaching in the summer. The remuneration for persons not employed full time by the University ranges from $622.35 per credit hour to $726 per credit hour. Thus, the salary for a three-credit course may range from a low of $1,867.05 to a high exceeding $5,000.

These direct instructional costs are offset, to a limited degree, by revenues derived from student tuition and fees. The University of Alaska 4-year campuses charge $35 per credit hour for undergraduate courses and $65 per credit hour for graduate courses, Anchorage Community College charges $30 per credit hour, and the remaining community colleges charge $25 per credit hour. For the summer of 1983, instructional costs were estimated as being approximately $1.1 million more than revenues. At the university centers alone, instructional costs were close to $900,000 more than revenues.

Throughout the higher education community it is common practice that summer session activities are expected to generate enough income to pay for instructional costs. Indeed, at many institutions the summer session program is expected to generate additional income for the academic year. One pointed illustration is Syracuse University, an independent

institution which charges in excess of $200 per credit hour. The remaining $2.8 million was used as additional revenue for the university.

Many public institutions, which charge minimal tuition, also generate at least enough income to pay for all instructional costs. For instance, Frostburg State College in Maryland, a public institution of 3,700 students charges $45 per credit hour for undergraduates and $64 per credit hour for graduate students in the summer and provides a variety of courses for approximately 1,900 students at no cost to the state. Also, Portland State University in Oregon provides course work in the summer on a self-sufficient basis for approximately 8,000 students. The tuition at Portland is $35 per credit hour for undergraduate credit and $60 per credit hour for graduate credit.

A recent survey* of 514 institutions conducted by the Association of University Summer Sessions and others found that over 75 percent of the responding institutions expected the summer sessions to generate revenues at least equal to instructional costs. Also, almost 50 percent expected revenues to equal instructional costs plus administrative costs and a substantial portion of overhead.

The University of Alaska should explore and implement strategies to make summer sessions more cost effective. This may require a combination of administrative changes which could include enhancing marketing

* Summer Sessions Associations' Joint Statistical Report, 1983, Association of University Summer Sessions, et al., 1983.

activities, scheduling popular courses and activities to ensure maximum enrollment, reducing faculty remuneration, or raising tuition. By adopting creative and imaginative strategies employed by other institutions like Syracuse University, which are able to generate surplus funds, the University can strengthen the total academic program.

It is crucial to emphasize that the Commission does not, in any way, suggest the elimination or curtailment of summer school. This recommendation merely recognizes that, given limited funds, the State may need to examine the practice of providing summer school at a substantial loss.

* * * * *

STRATEGY 10. IN ORDER TO ACCOMMODATE STUDENTS WHO ARE UNDERPREPARED FOR COLLEGE LEVEL WORK, THE CAMPUSES OF THE UNIVERSITY OF ALASKA SHOULD INSTITUTE DEVELOPMENTAL PROGRAMS WHICH ADDRESS SPECIFICALLY THE ACADEMIC DEFICIENCIES OF THEIR INCOMING STUDENTS.

There are basically two types of undergraduate admission policies identified by the Carnegie Council on Policy Studies in Higher Education: (1) Non-selective admissions, (often referred to as open admissions) which represents an estimated 40 percent of total admissions and occurs at most community colleges and at a number of liberal arts colleges and comprehensive colleges and universities; and (2) selective admissions, which varies from highly to moderately selective institutions and occurs at all levels of higher education.

The admissions policies at the University of Alaska, Anchorage (UAA) and the University of Alaska, Fairbanks (UAF) are fundamentally non-selective. According to the 1984-85 catalogue of UAA, "To qualify for admission as a freshman in a baccalaureate program a person must have graduated from an accredited high school with a grade point average of 2.5 (C+) or higher and have submitted scores on the American College Testing Program (ACT) or Scholastic Aptitude Test (SAT)." Probationary admission to UAA may be granted to high school graduates with a high school grade point average of at least 2.0, provided that the student enter a full-time program of study which is approved by the dean of the college or school.

At UAF, the most recent catalogue states that high school graduates qualify for admission if they have a high school grade point average of 2.0 (C) or higher. If the applicant has high school grades which are less than 2.0, he/she may be considered for probationary admission to UAF, based upon the student's performance on the American College Testing Program (ACT) or the Scholastic Aptitude Test (SAT).

The recent retention study conducted by the University, although preliminary, suggests that many admitted full-time students are ill-prepared for college level work at the three University centers. This alone is not particularly unusual; many institutions of higher education throughout the nation have the same experience. What appears to be missing at the University of Alaska campuses, however, is a comprehensive developmental program designed to enable these students to overcome their academic deficiencies and to achieve at their fullest

capacities. Without such a program, the open door admission becomes a revolving door. Developmental education, as defined here, should be a comprehensive educational program. Although used interchangeably with the term "remedial education," developmental education goes beyond traditional remediation. While remedial education deals with the problems of poor student academic preparation, developmental education helps students develop skills necessary for success in college, and includes both academic skills and social or cultural adjustments.

It is inappropriate for a campus to admit students who are unprepared without providing those services which are designed to help them succeed. If access is to be available to all, it is incumbent that developmental or remedial services be available to all who need them.

The admissions policies of Anchorage Community College and Tanana Valley Community College include a strong commitment to developmental and basic skills education and support services to students. As comprehensive community colleges, they provide a variety of learning assistance activities, which include tutoring, computer-assisted instruction, and reading/writing centers. In short, community colleges are and should be in the business of providing support services for underprepared students.

This strategy suggests specifically that the University of Alaska, Anchorage and the University of Alaska, Fairbanks develop admission standards which, commensurate with their mission, ensure that students who do matriculate have a high probability of succeeding academically. Those students who are unable to meet the admissions criteria at the

University centers should be counseled to attend the local community college for at least one academic year. After receiving the necessary developmental support at the community college and achieving academic success, the students can then transfer to the University center to complete their educational goals.

It should be noted that this procedure will allow the University to use its financial resources more efficiently than is now the case. Rather than attempting to provide a smattering of support services at the University centers, which may or may not be successful, funds should be targeted at the community colleges which already have the systems in place.

* * * * *

STRATEGY 11. AS PART OF ITS ONGOING PROGRAM REVIEW, THE UNIVERSITY OF ALASKA SHOULD CONTINUE TO AVOID UNNECESSARY DUPLICATION OF PROGRAMS AND GIVE SPECIAL ATTENTION TO DECISIONS ON ADDITIONAL PROGRAMS AT THE GRADUATE LEVEL.

Academic program development and review is fundamental to the orderly growth of the University system. Without careful analysis of student interest, cost, and program growth as it relates to the institutional mission, there is danger of an unnecessary proliferation of new courses or the continuation of inappropriate courses. In short, enhancing and maintaining academic efficiency requires the University to continually assess its offerings.

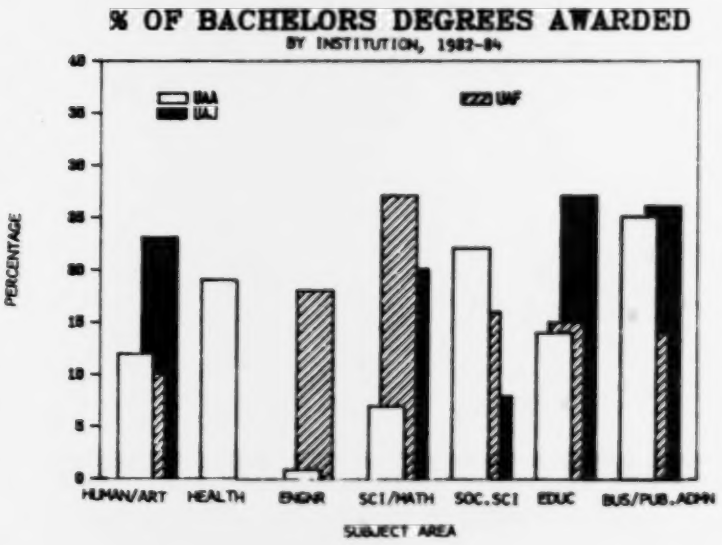
Mission statements of each of the University centers have been developed (see Appendix E in Volume II). Such statements have attempted to depict special areas of emphasis in order to provide each center with a distinctive character and to eliminate needless duplication. The University of Alaska, Anchorage, because of its location, emphasizes programs that focus on the social, human service, organizational, economic, physical, biological, and cultural dimensions of the State's major population center. Instruction is provided in the arts, sciences, health and social services, urban planning, communications, education, business, public administration, and engineering with particular emphasis on urban and regional development in a northern environment.

In Fairbanks, the University reflects its historic role as a land grant institution. As the State's primary residental institution, the University of Alaska, Fairbanks offers baccalaureate and masters degrees in the arts, sciences, and professional education as well as selected doctoral programs in areas of particular strength.

Located in a major governmental center on inland waters, the University of Alaska, Juneau has been assigned primary responsibility for the sea grant functions of the statewide system. General education in the liberal arts forms the core of the educational program while baccalaureate, professional, and masters degree programs are offered in the applied areas of business, fisheries, public administration, and teacher education.

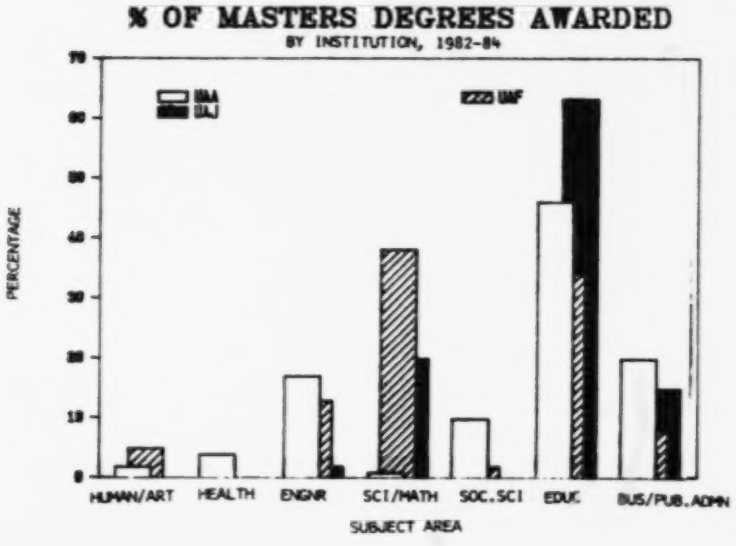
One effective way of examining the missions of the University centers is by focusing upon the proportion of degrees awarded by subject areas. Figure 6 illustrates graphically the percentage of bachelors degrees awarded by subject area for the past three years at each of the institutions. In general, the degrees awarded should, and do, reflect the institution's mission. All the institutions show a common core of liberal arts and sciences. The University of Alaska, Anchorage reflects a strong commitment to health professions, education, and business and public administration. The University of Alaska, Fairbanks exhibits particular emphasis in engineering, natural sciences, and math. The University of Alaska, Juneau features offerings in the natural sciences, education, and business and public administration.

FIGURE 6



At the masters level, however, a different configuration is evident. Figure 7 displays the percentage of masters degrees awarded by subject areas for the past three years at each of the University centers. It is clear that professional education and science programs represent major portions of the graduate offerings. Indeed, education alone provides over a third of all degrees awarded at the University of Alaska, Fairbanks; approximately half of the degrees awarded at the University of Alaska, Anchorage; and almost two-thirds of the degrees awarded at the University of Alaska, Juneau.

FIGURE 7



When addressing the concept of program duplication, it is essential to ask the question if the duplication is needless or necessary. Any significant analysis of the costs of duplication must consider not only the direct cost to the institution and the system, but also total cost to the State. Studies show that proximity of colleges to population is a major factor in determining where people go to college. In many cases it

is the proximity of educational offerings which allows the student to continue to live at home, to continue to work, and to avoid the costs associated with moving to a single location where a non-duplicated program is available. If duplication were completely eliminated, the State's direct cost might be lowered, but the total cost to society would be greatly increased as higher education became less readily available to many of the people in the State.

The Commission suggests that complete elimination of duplication is both unrealistic and unwise. In view of the common purposes of the higher educational institutions, duplication in the basic arts and sciences at the undergraduate level is both necessary and desirable. The foundations of knowledge such as mathematics, the natural sciences, the social sciences, and the humanities and fine arts, are disciplines which not only contribute to the intellectual, personal, and social development of the student, but also serve as the roots of specialization in any academic or professional field.

However, duplicating programs of specialization beyond these basic foundations may warrant that certain additional limitations be placed upon their development. Table 3 lists the masters degree programs which are offered at more than one campus and indicates the total degrees awarded during the past six years. Several of the programs have averaged four or less graduates per year. The Commission suggests that duplicative graduate and professional programs should be developed only when they are consistent with the institution's mission and only if they comply with the following guidelines:

1. A duplicating program at the masters level should be authorized on the basis of need, cost, and institutional mission, provided that the annual number of bachelor degrees in the department (all subspecialties) averages ten or more for the previous five years.

2. New programs should not be undertaken in the absence of substantial student interest and social need. Evidence of social need includes demand for its graduates, and negative social consequences if the program is not provided.

3. New programs should not be initiated if other institutions are meeting the State's social needs and if Alaskan citizens have access to such programs on a non-discriminatory basis.

4. No program should be undertaken unless its quality can be assured by the human and economic resources of the institution.

5. High cost programs should be developed only when there is compelling justification in terms of social need and when there is strong evidence that the program quality will be assured by the institution's resources.

TABLE 3

DUPLICATE MASTERS DEGREE PROGRAMS
NUMBER OF MASTERS DEGREES AWARDED SINCE 1979

PROGRAM	UAA	UAF	UAJ	APU	TOTAL	6 YEAR AVERAGE
Fisheries	-	11	13	-	24	4
Business Administration	40	52	3	-	95	16
Education	248	111	63	62	484	81
Vocational Education	-	2	3	-	5	1
Arctic Engineering	5	5	-	-	10	1
Civil Engineering	10	15	-	-	25	4
Engineering Management	36	13	7	-	56	9
Environmental Quality Engineering	5	3	-	-	8	1
Environmental Quality Science	3	10	-	-	13	2
Science Management	7	6	-	-	13	2
English	11	18	-	-	29	4
Biology	2	25	-	-	27	4

* * * * *

STRATEGY 12. THE ADDITION OF NEW FACILITIES FOR THE UNIVERSITY OF ALASKA SHOULD CONTINUE TO BE THE RESULT OF CAREFUL PROGRAM PLANNING AND ONLY AFTER ALL ALTERNATIVES HAVE BEEN EXHAUSTED.

The Capital Improvement Plan of the University of Alaska for the years up to 1991 provides detailed summaries of available space and the capital needs of each of the campuses. For the first time in its history, the University of Alaska has information of this kind and the effort should be applauded.

The University, at present, possesses approximately 3,150,000 gross square feet of facilities whose total worth is about $410 million. The

FY 1986-91 capital request for major projects alone equaled over 2,700,000 gross square feet at a cost of around $750 million. In addition, annual operating costs associated with these requests would be close to $21 million. Certainly, these demands for additional facilities would seem to exceed future available resources and the University, recognizing this, has since placed a limit of $300 million on the requests for major projects.

The Commission endorses the initial planning statement for FY 1987-88 developed by the University. The statement suggests that . . . "a system priority over FY 1987-88 will be to bring each campus enough new funding to provide a minimum general education core faculty and meet current demands for lower division transfer credit core curriculum." Along with funding the operating and maintenance costs of new facilities, enrollment growth, and any extraordinary inflation, it is planned that this will be the major thrust of the University's operating budget request. The request of additional facilities should relate directly to this plan.

The Board of Regents of the University is currently grappling with the complex issues surrounding facilities planning. However, a few comments and observations are appropriate as the University's facilities planning relates to the educational needs of the entire State.

1. The University should continue to explore creative academic scheduling techniques to maximize facilities usage (see Strategy 17).

2. Cooperative agreements for facilities usage should be extended to both the public and private sectors. In particular, negotiations to use unoccupied academic space at Alaska Pacific University and Sheldon Jackson College should be explored.

3. As noted in the University's planning statement, innovative financing will be examined for use when possible. A recent survey by the Department of Facilities Planning of the University of Idaho describes the source of funds used to construct or remodel academic facilities at the public universities in each of the 50 states. A summary of the results of the survey are included in Appendix F in Volume II.

* * * * *

STRATEGY 13. TO IMPROVE THE QUALITY AND EFFICIENCY OF VOCATIONAL EDUCATION DELIVERY, THE DEPARTMENT OF EDUCATION AND THE UNIVERSITY OF ALASKA SHOULD INSTITUTE REGIONAL VOCATIONAL EDUCATION PROGRAMS BETWEEN THE HIGH SCHOOLS AND THE COMMUNITY COLLEGES.

Secondary vocational programs, community colleges, and vocational/technical institutions, should develop articulation procedures in order to avoid repetition between the secondary and postsecondary sectors. Programs to link the two levels, commonly called regional vocational education programs, should be implemented by the local school districts, and community college and voc/tech institute officials. The basic premise here is that, given limited resources, providing identical curricula for vocational education at two institutions within the same

geographic region is poor stewardship of the State's resources. One model program that approaches this concept is found in a joint agreement between Anchorage Community College and the Anchorage school district. This agreement provides for a sequence of courses in the Aviation Maintenance Technology Program. Using sophisticated equipment available at Merrill Field Aviation Complex, both high school students and community college students can enjoy the advantage of one articulated curriculum devoid of duplication.

Consideration should also be given to development of an advanced vocational placement program, similar to that for academic subject areas, to give secondary vocational students the opportunity to accelerate their postsecondary training.

Cooperation between and within education programs is a significant method for increasing effectiveness while controlling costs. In some cases, adult and postsecondary programs may be better able to meet specialized equipment and staffing needs of students in the secondary schools. High schools within commuting distance of a community college or vocational/technical institute can avoid duplication through arrangements for greater student use of these facilities. On the other hand, several high schools throughout the State possess excellent vocational education equipment and it would be appropriate for the community colleges to utilize it for their students. Since a large number of community college students attend classes in the evening, there appears to be ample opportunity for the sharing of resources.

Regional vocational articulation practices, where secondary vocational programs are directly integrated with community college or vocational/ technical institute programs, and vocational advanced placement programs, require a great deal of cooperation and coordination. Indeed, it cannot be stated too strongly that cooperation between the Department of Education and the University of Alaska is an essential prerequisite before effective solutions to the problems of vocational education can be reached. Therefore, it is recommended that the Department of Education and the University assign appropriate personnel with the specific task of establishing lines of communication and proposing policy relative to the elimination of duplicate vocational education programs and courses.

Many of the community colleges have established vocational advisory committees, and the Commission encourages the continuation of these very valuable resources. The committees should have a membership drawn partly from the program staffs of the appropriate community colleges, vocational/ technical institutes, high schools, and partly from business, industry, and labor. Since job market areas will vary, the membership should vary as well, depending on the occupation. These committees should be representative of all the public vocational education providers in the job market area and be advisory to the respective schools, institutions and the State Board for Vocational Education, thereby ensuring that services are coordinated across programs and not unnecessarily duplicated.

* * * * *

STRATEGY 14. THE STATE SHOULD EXPLORE THE POSSIBILITY OF ENHANCING THE EFFICIENT USE OF EDUCATIONAL FACILITIES BY ENTERING INTO CONTRACTUAL RELATIONS WITH INDEPENDENT COLLEGES AND UNIVERSITIES IN ALASKA AND THEREBY REALIZE COST SAVINGS TO THE STATE.

Independent colleges and universities play an important role in meeting the educational needs of the citizens of Alaska. They directly serve the public interest as integral partners in a pluralistic system of higher education. While helping to enhance access, choice, and diversity, independently governed institutions are an educational alternative which provides quality and value-oriented education at substantial financial savings for the State. Unlike state-operated institutions whose revenues come principally from appropriations, independent colleges and universities derive most of their income from private sources.

Faced with the specter of rapidly declining revenues, public interest requires that the State focus its education policy goals on achieving the most efficient and equitable use of all the resources available. In short, a public policy decision which results in wasted private facilities while funds are sought to enlarge public institutions is unwise stewardship in this time of scarcity. More to the point, building new classrooms or setting up new laboratories is more expensive, by far, than continuing to use those already in place. This strategy rests upon the long established practice of using public resources to purchase services of the State's choosing from the private sector when and where it is economically and programmatically advantageous for the State to do so.

Providing financial support to independent institutions is not uncommon in the United States. Seventeen states provide direct aid through methods such as unrestricted appropriations, contracts for programs, grants, or aid based on FTE enrollment. Many states contract with individual independent institutions to provide educational programs and services which might not otherwise be available in the state.

Through a variety of programs, every state offers financial assistance to students attending independent institutions, and a number of states have tax policies that relate to the treatment of educational costs. These policies include exemptions of educational expenses, credits for contributions to institutions, personal exemptions for dependents enrolled in independent colleges, deductions for dependents in college, and "IRA-like" funds for education.

The Commission is aware that Article VII, Section 1 of Alaska's Constitution prohibits the payment of money from public funds "for the direct benefit of any religious or other private educational institutions." The Commission is also aware that a tuition equalization program, established in 1972, was declared unconstitutional by the Alaska Supreme Court and that a 1976 constitutional amendment, which would have legitimized the program, failed to be adopted by the voters.

Nevertheless, an expansion of the State's educational obligations can be achieved through means which are not contradictory to the spirit and intent of Article VII. Some examples of such methods are:

1. contracting for services in special academic program areas and in meeting other State obligations for postsecondary educational opportunities;

2. long-term, low interest loans for capital construction and renovation projects modeled after existing federal programs for private education and Alaska programs for the private business sector; and

3. in the event of a state income tax, provision of tax incentives to parents of students attending independent Alaskan higher educational institutions.

The Commission strongly encourages positive action to ensure a more effective and efficient use of resources and facilities. Alaska is entering a new era characterized by diminishing revenues. Also, the relationship between the University of Alaska and independent institutions has changed dramatically. In the mid-seventies, the University had yet to experience rapid expansion and the private sector was tenuous at best. Today, over 32,000 students attend the University of Alaska, while two independent institutions, Alaska Pacific University and Sheldon Jackson College, enroll close to 1,000 students. Both independent institutions are experiencing a renewal of vigor and offer a variety of excellent programs. The State of Alaska should utilize these valuable resources as much as possible to benefit its citizens.

GOAL: IMPROVE ACCESS to accommodate those citizens who desire postsecondary education.

STRATEGY 15. THE COMMISSION RECOGNIZES AND ENCOURAGES THE EDUCATIONAL CONTRIBUTION OF THE INDEPENDENT INSTITUTIONS OF HIGHER EDUCATION IN ALASKA.

As noted in Strategy 14, the independent colleges and universities, Sheldon Jackson College and Alaska Pacific University, play an important role in meeting the educational needs of the citizens of Alaska. In particular, the independent sector promotes diversity. Kingman Brewster, President Emeritus of Yale University, noted that independent colleges and universities ensure that government alone will "never become the final arbiter, the principal allocator, the controller of all the society's resources devoted to the advancement of knowledge and its transmission to succeeding generations."

Independent colleges also have the luxury of being small. This gives them the opportunity to be flexible, ability to innovate, and the wherewithall to take risks with new programs without having to move large bureaucracies or require enormous amounts of capital. Also, independent institutions promote human values; unlike public institutions who must maintain institutional neutrality on many fundamental issues, independent institutions, by contrast, are free to place humanistic values at the core of their curricula.

Sheldon Jackson College, located on a 345-acre campus in Sitka, offers associate and baccalaureate degrees in several academic programs. Historically, the college has provided a supportive residential experience to Alaska Natives. Currently, 62 percent of the student body is comprised of Alaska Natives, many of whom come from rural and small schools.

Alaska Pacific University, located in Anchorage, provides an educational experience which addresses four environments that make up the human condition: the natural environment, the individual environment, the social environment, and the spiritual environment. Eschewing the traditional major, Alaska Pacific University offers concentrations which link these four environments to knowledge and career areas in order to prepare its students for the future.

In sum, the Commission supports the educational commitment of the independent sector. These institutions constitute a valuable resource which has proven be a powerful force in nurturing values, cultivating ideas, and solving problems.

* * * * *

STRATEGY 16. THE UNIVERSITY OF ALASKA, ALASKA'S INDEPENDENT UNIVERSITIES AND COLLEGES, AND ALASKA'S HIGH SCHOOLS SHOULD CONTINUE TO EXPLORE AND EXPAND HIGH SCHOOL ADVANCED PLACEMENT PROGRAMS TO ENHANCE ARTICULATION BETWEEN HIGH SCHOOL AND COLLEGE.

The basic premise of a High School Advanced Placement Program is that outstanding high school seniors, given outstanding instruction in college-level material, do demonstrate proficiency in college coursework through college-level examinations. The program allows academically talented high school students to engage in college-level work while remaining in high school. At the completion of the course in the high school, students can be given the opportunity to take college-level examinations, which would essentially be considered university departmental challenge examinations. The examinations are usually graded on a standard equal with university freshmen. The underlying pedagogical basis for the High School Advanced Placement Program is that education is a continuum of learning experiences, and the following fundamental characteristics of such a program reflect this continuum.

- The program provides that the best high school students, taught by some of the best high school teachers with assistance from highly capable professors, engage in educational experiences and opportunities which otherwise might not be available. The high schools choose the student participants. The high schools also choose the teachers, selecting only their most capable teachers since the program requires excellence. The University chooses its professors to work with the high school teachers.

•The syllabus which is used in the classroom is created or modified by the university professor. Recommendations are made by the professors concerning supplemental materials, and in many instances, professors would actually visit and/or teach several times during the school year.

•The university professors design the examination which is given at the end of the semester, oversee the administration of the examination, and most importantly, grade the examination on a standard comparable to the university freshman. The grade assigned by the high school teacher for each student in no way affects the college grades. Thus, it would be possible for a student to earn an "A" from a high school teacher based on that teachers assignments, and yet receive a lower college assessment from the university professor. The university professor would provide documented assurance that any university credit earned is justified in terms of the content mastery demonstrated through rigorous examinations given to the high school students.

•The primary benefit of the program is that students would not have to travel any distance to take courses. They would not have to leave the high school, either on a full-time or part-time basis, in order to engage in college-level work. Most importantly, students would gain access to college-level credits and college-level materials. Students and their parents could also save money by not having to repeat the courses in college.

Programs similar to the one described here are being conducted successfully at Syracuse University and within the states of Oregon and Maryland. Also, the State Educational Department of New York and the Regents of the University of the State of New York have firmly supported this type of program. "The Articulation of Secondary and Postsecondary Education," a position paper by the State Education Department in New York, contains this pertinent item:*

> "The Regents encourage post-secondary institutions, in cooperation with the secondary schools, to provide challenging opportunities for high school students who have demonstrated intellectual and social maturity. These opportunities might include early admission to college, collegiate-level work offered in the high school, or other means of providing advanced work."

Many students who enter the senior year of high school with thoughts of easily earning their last one or two units necessary for high school graduation would now be able to enter the senior year with increased dedication to learning. The rigorous program would be a challenge to the intellectual resources of each individual student and most importantly, the entire educational system of the State would be enriched through the cooperative efforts between the high schools and the postsecondary education community. This model can expedite the education of students without sacrificing quality.

* * * * *

* John Sartorius, "High School Advanced Placement Program Position Paper," unpublished report, Salisbury, 1974.

STRATEGY 17. THE UNIVERSITY OF ALASKA AND OTHER INSTITUTIONS SHOULD CONTINUE TO EXPLORE AND IMPLEMENT SCHEDULING ALTERNATIVES THAT IMPROVE ACCESS FOR THE OLDER, PART-TIME STUDENT.

Approximately 75 percent of the students that attend the University of Alaska are enrolled on a part-time basis. Approximately 7 out of 10 part-time students are over 25 years old. Indeed, over 50 percent of the part-time students are 30 years old or older. Without question, the University has been, and continues to be, a valuable educational resource for the mature adult learner. Thus, it is appropriate that the University devise curricular strategies specifically designed to accommodate the needs and interests of this important clientele. Put another way, the non-traditional learner demands a non-traditional educational response.

In general, the adult learner has specific characteristics that relate to educational delivery. These characteristics include self-direction, maturity, and decision-making ability. These aptitudes lend themselves to various types of innovative learning environments which can often extend beyond the college campus. Enough information has now been gathered from various sources about the adult learner in Alaska to offer two interrelated generalizations: (1) because of various factors, many adult learners have difficulty persisting for a full 15 to 16 week semester, and therefore, (2) short, intensive educational experiences are preferred by many adult learners.

Approximately 140 baccalaureate programs designed specifically for adults are available in 40 states in the United States, most of them set within established public or private institutions. In an excellent report entitled "Adult Baccalaureate Programs," prepared by the ERIC Clearing House on Higher Education, several ideas and suggestions concerning adult education are presented and bear repeating here.

•A considerable amount of research concerning adults' self-perception suggests that adults' view of themselves as learners and their learning needs determine how they approach formal education and what they expect to gain from it. Adult students view themselves as self-directing individuals, capable of making decisions about their education and accepting the consequences of their actions. They are able to engage in self-diagnosis of their educational needs and they prefer action-oriented learning techniques.

•Adults enrolled in individually designed programs are able to relate their learning to personal concerns and to make learning compatible with their work and family environment. These programs afford a variety of learning modes, which include group learning, independent study options, documenting prior or experiential learning, and formal college courses. Many of these adult programs encourage students to include in their degree programs learning that has occurred outside the host institution.

•The role of faculty in adult programs is expanded beyond that of

classroom teacher to working with adults in independent learning settings as mentors, learning facilitators, or learning consultants.

•Many colleges are making their instructional schedules more flexible to accommodate adults. Modular scheduling that includes evening offerings is quite common, and increasingly, short, intensive programs are being made available through weekend colleges, seminars, institutes, and clinics. Moreover, some programs were described as being strictly self-paced, with no specified time schedule of operation.

•Faculty have been urged to adopt a particular set of attitudes and behaviors as they carry out their instructional functions with adult learners. The student-teacher model gives way to an emphasis on the "student-mentor" relationship. The faculty mentor serves as a facilitator in helping learners determine their needs and discover what resources can be brought to bear on these means.

In summary, the Commission recommends that mature citizens be given more consideration in postsecondary education and echoes the following statement by the Commission on Non-Traditional Study: "[the Commission advocates a program that] puts the student first and the institution second, concentrates more on the former's needs than the latter's convenience, encourages diversity of individual opportunity rather than uniform prescription, and de-emphasizes time, space and even course requirements in favor of competence and, where applicable, performance."

* * * * *

STRATEGY 18. THE STATE AND THE UNIVERSITY SHOULD EXPLORE THE POSSIBILITY OF PARTIALLY FINANCING THE COMMUNITY COLLEGES THROUGH LOCAL TAXING AUTHORITIES.

Most community colleges in the United States receive a share of their total financial support from local revenues. The local appropriations to community colleges are generally derived from taxes levied on district property values. According to a 1982 survey by the National Association of College and University Business Officers, the median percentage of revenues for community colleges coming from local governments was 12.2 percent. Tuition and fees accounted for 17.4 percent of total revenues and state appropriations equaled 54.6 percent.

In Alaska, local governments contribute little or no financial support to the community colleges located in their district. The exception is Valdez which has historically contributed substantial funds to Prince William Sound Community College; for FY 1985, Prince William Sound Community College received $576,500 from the local municipality.

As State revenues continue to decline, it may now be time to supplement the budget of the community colleges through increased local funding. It is altogether appropriate to provide local funding since the central mission of the community college is to serve the local citizens. It should also be noted that an increase in funding by the local community may require a re-evaluation of the policy-making authority of the local citizens. That is, it is reasonable to assume that along with increased local funding comes increased local participation.

One problem which immediately arises is that the capacity of local governments to provide revenues to the community college varies considerably. In general, however, local governments for eight of the eleven community colleges in Alaska have a sufficient tax base to provide some funding. Those community colleges in the western rural area of the State have, by far, the least ability to contribute.

Table 4 shows the percentage of the local community college budget which could be provided by local funds if a tax rate of .5 mills was levied on the full value of property.* With the exception of the rural community

TABLE 4

PERCENTAGE CONTRIBUTION TO THE LOCAL COMMUNITY COLLEGE BUDGET USING .5 MILL ASSESSMENT OF 1984 FULL VALUE DETERMINATION OF LOCAL PROPERTY

Community College	1984 Full Value Determination of Local Property	Per Capita Value	.5 Mill Assessment	FY84 CC Budget	% Contribution to Community College Budget
Anchorage	$13,199,355,800	$ 54,089	$6,599,678	$24,468,000	27%
Chukchi	$ 85,041,480	28,528	42,521	1,067,900	4%
Islands	$ 756,351,400	92,002	378,176	1,345,600	28%
Ketchikan	$ 711,341,600	49,696	355,671	1,827,700	20%
Kodiak	$ 651,444,700	48,330	325,722	2,396,500	14%
Kenai Peninsula	$ 3,102,640,000	79,720	1,551,320	4,283,700	36%
Kuskokwim	$ 170,370,900	46,284	85,185	4,650,000	2%
Matanuska-Susitna	$ 1,773,384,960	52,112	886,692	2,158,200	41%
Northwest	$ 207,050,000	55,480	103,525	2,331,400	4%
Prince William Sound	$ 1,720,125,130	466,538	860,063	2,119,900	41%
Tanana Valley	$ 3,627,908,630	52,100	1,813,954	5,338,300	34%

* Alaska Taxable, Alaska Department of Community & Regional Affairs, Volume XXIV, January 1985.

colleges mentioned, the percentages range from 14 percent at Kodiak Community College to 41 percent at Matanuska-Susitna Community College and Prince William Sound Community College.

Table 5 illustrates the mill rate that would have to be assessed on the full value of property for the local government to contribute 10, 20, or 30 percent of the local community college budget.

TABLE 5

MILL RATES ON FULL VALUE DETERMINATION OF LOCAL PROPERTY NEEDED TO FUND 10, 20, AND 30 PERCENT OF THE LOCAL FY84 COMMUNITY COLLEGE BUDGET

Community College	10% of CC Budget	= Mill Rate	20% of CC Budget	= Mill Rate	30% of CC Budget	= Mill Rate
Anchorage	$2,446,800	0.19	$4,893,600	0.38	$7,340,400	0.57
Chukchi	106,790	1.26	213,580	2.51	320,370	3.78
Islands	134,560	0.18	269,120	0.36	403,680	0.54
Ketchikan	182,770	0.26	365,540	0.52	548,310	0.78
Kodiak	239,650	0.37	479,300	0.74	718,950	1.11
Kenai Peninsula	428,370	0.14	856,740	0.28	1,285,100	0.42
Kuskokwim	465,000	2.73	930,000	5.46*	1,395,000	8.19*
Matanuska-Susitna	215,820	0.12	431,640	0.24	647,460	0.36
Northwest	233,140	1.13	466,280	2.26	699,420	3.39
Prince William Sound	211,990	0.12	423,980	0.24	635,970	0.36
Tanana Valley	533,830	0.15	1,067,660	0.30	1,601,490	0.45

The Commission realizes that there are other competing services in the local areas which are deserving of local support. Moreover, the

* Exceeds tax limitation. Second class cities may not levy taxes which exceed .5% of the assessed value of property.

Commission is also cognizant of the decreasing federal support which may further constrain the ability of the local municipality to provide revenues to its community college. It is therefore recommended that local funding of the community colleges be phased in over a several year period. This procedure will allow the municipalities to assess the fiscal impact in a rational and systematic fashion.

* * * * *

STRATEGY 19. THE UNIVERSITY OF ALASKA SHOULD BE ENCOURAGED, THROUGH BUDGETARY SUPPORT, TO EXPAND THE TELECOMMUNICATIONS EFFORT TO ENHANCE ACCESSIBILITY AND IMPROVE EDUCATIONAL DELIVERY. THE BUDGETARY SUPPORT SHOULD BE DIRECTED TOWARD INCREASED SUPPORT OF FACULTY DEVELOPMENT AND PRODUCTION OF SOFTWARE FOR TELEVISION AND COMPUTERS.

The University of Alaska Instructional Telecommunication Service (UAITS) was established in 1980 and at present serves all units of the University. The UAITS manages and operates the LEARN/Alaska Network (LAN), which consists of statewide television, audio conferencing systems, and a demonstration teletext system. The Network serves four constituencies: (1) University of Alaska faculty and students; (2) the Alaska Department of Education, and Alaska's 53 school districts, their staff and students; (3) non-profit publicly funded educational agencies and their clients; and (4) the public viewers of the instructional television channel. UAITS also provides instructional support services to university faculty using the LAN. The LAN provides services to over 200 communities for audio conferencing and over 230 communities receive instructional television.

This distance delivery approach shows great promise for improving access, both in quantity and quality of courses offered, to students in remote parts of the State. Instructional television, audio conferencing, and computers allow for greater flexibility and convenience to the learner. Distance learning permits the student to be exposed to a variety of expert teachers. In addition, statewide programs such as nursing and paralegal studies can be made available to interested students regardless of geographical location.

As State revenues decline, UAITS becomes increasingly important to the University's ability to serve students throughout the State. Absent the ability to continue to construct educational facilities distance learning can be a viable, and indeed exciting, alternative. The potential of the new and ever changing technology has yet to be tapped. It is ironic that, although Alaska has been recognized as a forerunner in educational information technology, telecommunications in the State is still in its infancy. It appears that its value in educational delivery is only limited by the creativity and initiative of its users.

Distance delivery can be a very efficient method of providing educational service. The necessary capital outlay has already been spent to establish the instructional television service and extending this service to additional students represents only marginal or incremental cost increases. This approach can enjoy a lower per-student cost than classroom or community based programs.

The tremendous potential of this delivery system notwithstanding, there are problems and issues that must be addressed. These include the lack

of adequate library resources for distance learners and faculty assistance. In particular, there is need for increased support of faculty development to effectively incorporate telecommunication into the instructional process. Also, support must be expanded for the production of software for television and computers, which is specific and appropriate to instruction and curricula in Alaska. Moreover, there is the more fundamental question of accommodating the teaching process to match the learning style of the student. Still, it is in the State's best interest to fully exploit the capacities of electronic media to address existing patterns of adult participation in education.

* * * * *

STRATEGY 20. TO INCREASE THE IN-STATE COLLEGE PARTICIPATION RATE OF HIGH SCHOOL GRADUATES, THE UNIVERSITY OF ALASKA SHOULD EXPAND ITS RECRUITMENT EFFORTS WITH PARTICULAR ATTENTION TO PROVIDING INFORMATION ABOUT THE AVAILABILITY OF IN-STATE INSTRUCTIONAL PROGRAMS.

Although the information is somewhat dated, the latest national data provided by the National Center for Higher Education Management Systems (NCHEMS) concerning the college participation rates of Alaskan residents indicates that Alaska compares favorably with other states. For instance, in 1978, Alaska ranked fifth when comparing the participation rates of first-time resident enrollment in public institutions per 1,000 population (see Table 6). Although comparable information is not available from other states, more recent information collected by the Commission shows that approximately 24 percent of the 1984 graduating high school seniors attended in-state colleges in the fall of 1984.

TABLE 6

PARTICIPATION RATES OF FIRST-TIME RESIDENT ENROLLMENT IN PUBLIC INSTITUTIONS PER 1000 POPULATION 1978

Rank	State	Per 1000 Population	Index	Rank	State	Per 1000 Population	Index
1	Arizona	15.9	196	26	Delaware	7.1	87
2	Oregon	14.3	176	27	Minnesota	7.1	87
3	Wisconsin	12.9	160	28	Tennessee	7.0	86
4	California	12.6	156	29	Missouri	7.0	86
5	Alaska	12.1	149	30	Montana	6.7	82
6	Wyoming	10.8	133	31	Ohio	6.7	82
7	North Dakota	10.8	133	32	Massachusetts	6.4	79
8	North Carolina	10.5	130	33	Connecticut	6.4	78
9	Nebraska	10.4	128	34	South Dakota	6.3	78
10	Nevada	10.3	127	35	Rhode Island	6.2	76
11	Maryland	10.1	125	36	Indiana	6.1	75
12	Illinois	10.0	124	37	Florida	6.0	75
13	Utah	9.7	119	38	New York	6.0	74
14	Michigan	9.3	115	39	Idaho	6.0	74
15	Mississippi	9.3	115	40	Arkansas	6.0	74
16	Kansas	9.1	112	41	New Mexico	5.9	72
17	Texas	8.9	110	42	West Virginia	5.6	70
18	Hawaii	8.7	108	43	Kentucky	5.3	65
19	Oklahoma	8.6	106	44	New Hampshire	5.1	63
20	South Carolina	8.6	106	45	Virginia	5.1	63
21	Colorado	8.4	103	46	Pennsylvania	5.0	62
22	Iowa	8.1	100	47	Washington	4.5	56
23	Alabama	7.8	96	48	Maine	4.3	53
24	Louisiana	7.3	89	49	Georgia	4.2	52
25	New Jersey	7.1	88	50	D.C.	4.2	52
				51	Vermont	4.0	50
					U.S. Average	8.1	100

A myriad of factors affect college participation rates. These include, but are not limited to, parents' education, social class, peer pressure, community values, and cost. Some factors which are related to whether or not students attend colleges in Alaska are program availability, location, cost, weather, and size. One notion that should not be overlooked is that many high school seniors tend to think that the local

college is not as "good" as the colleges and universities in other states merely because of its proximity. It is to this issue that this recommendation is addressed.

The University of Alaska should intensify its recruitment procedures with the primary purpose of making high school students more aware of the opportunities available at the individual campuses. At the heart of the recruitment effort should be the goal of improving the "fit" between the students' needs and the institution's offerings and resources. The better the fit, the more likely students will enroll and successfully complete their education. These efforts also can lead to the overall improvement of the college's program and capacity to predict fiscal and human resource demands.

There are several strategies which can be used to increase the awareness of high school students of the services offered by the University. High school visitations by college representatives, both administrators and faculty, is a basic activity in the admissions process. By using services like the College Entrance Examination Board Student Search Service, direct mail can be sent to seniors. These materials should be designed to highlight those qualities which are particularly relevant to the kinds of students the college seeks. Also, phone-a-thons are becoming a popular and effective method of communicating personally with prospective students.

In sum, developing techniques which serve to enhance the information about the University provided to prospective students benefits both parties. The University will increase the pool of potential students

and, perhaps more importantly, high school seniors will become more knowledgeable consumers and will be able to make a more informed choice about their future educational plans.

* * * * *

STRATEGY 21. A STATE SCHOLARSHIP PROGRAM FOR EXCEPTIONAL STUDENTS SHOULD BE ESTABLISHED.

Alaska has no competitive academic scholarship program. Alaska's top academically talented high school seniors can many times receive better financial aid by attending out-of-state institutions than ir-state. This should be corrected. Alaska's institutions should not be placed at a disadvantage in competing for students who display high achievement, nor should Alaska's brightest students receive anything less than full encouragement to remain in Alaska for their schooling.

The only state-funded scholarships available at present, other than specific tuition waivers, are through the University of Alaska, Fairbanks. These include two programs: a Native Alaskan Scholarship and a State Room Scholarship.

The Alaska State Scholarship Program should be established to provide recognition of academic excellence and financial assistance to Alaska's academically gifted students. The scholarships could be need-based or non need-based, but should require a high academic performance record to maintain eligibility throughout the undergraduate program of study.

The scholarships should be in the amount of $4,000 per academic year, and preference should be given for in-state attendance. Appendix G in Volume II contains sample legislation establishing a competitive, non need-based scholarship program for Alaska.

* * * * *

STRATEGY 22. AS A COOPERATIVE EFFORT BETWEEN THE COLLEGES AND UNIVERSITIES AND THE HIGH SCHOOLS IN THE STATE, DIAGNOSTIC TESTS IN MATHEMATICS AND ENGLISH COMPOSITION SHOULD BE ADMINISTERED IN THE JUNIOR YEAR OF HIGH SCHOOL SO THAT APPROPRIATE REMEDIAL COURSES CAN BE OFFERED IN THE SENIOR YEAR OF HIGH SCHOOL, RATHER THAN AT THE COLLEGIATE LEVEL.

Since 1977, the Commission has conducted an annual survey of high school seniors to ascertain, among other things, their opinions of their need for additional assistance in selected academic areas. The pattern has been very consistent over the past several years. Approximately one half of those seniors planning schooling beyond high school expressed a need for assistance in improving math skills, and over a third wanted help in improving writing skills. Although specific numbers are not available, college and university officials in the State have noted that a substantial number of students are enrolling with academic deficiencies which hinder expected progression through the college curriculum and require the development of expensive remedial course work at the collegiate level. The nonselective admissions policies of the colleges and universities, albeit necessary for educational opportunity, provide little incentive to high school students to gain the preparation they

need for success in college. Also, minimal communication between the high schools and colleges may have caused confusion over what is expected of freshmen.

This strategy for improving preparation of college-bound students involves both the early communication of expectations and the early assessment of student competencies. Thus, students are provided the opportunity to correct identified deficiencies while still in high school, which will greatly reduce the need for remedial course work in college. The following is a brief description of how the program would work:

- On a volunteer basis, high school juniors would take mathematics and English composition diagnostic tests in January or February. The diagnostic tests would be equivalent to placement examinations taken by entering freshmen at the colleges.

- Each student tested would receive a personalized report of his or her performance on the examination and would be assigned a mathematics and English composition placement level.

- For those students who require remedial work, special courses would be developed in the high school senior year which would specifically address the students' academic deficiencies.

In sum, the purpose of this strategy is to identify students' mathematics and English composition strengths and weaknesses in relation to the

standards expected of college freshmen so that identified needs may be given attention in senior year courses. The benefits of such a program are substantial. First, a considerable amount of money can be saved by eliminating unnecessary remedial instruction at the collegiate level. Second, high school students would be getting the best possible preparation for college mathematics and English composition. Lastly, a valuable dialogue among high school teachers and counselors and college and university faculty would be established.

The State of Ohio and, in particular, Ohio State University have experienced spectacular success with a program similar to the one described here. For this reason, Ohio was named a "lighthouse" state by the National Association of State Boards of Education and the Chief State School Officers, and was a significant focus of a national report entitled "A Joining of Hands" which suggests how these developments can best be shared or expanded nationwide. The benefits of this program in Ohio have been well documented, a few of which are included here.

- The Ohio State University reports that the number of students enrolling directly from high school who require remediation in mathematics has declined from 37 percent in 1982 to 14 percent in 1984.

- Universities which have implemented unconditional admissions policies to date have experienced <u>increases</u> in minority enrollments despite a pattern of decreased minority enrollments nationwide.

•High schools across the State are experiencing increased enrollments in those classes recommended for college preparation, particularly mathematics and foreign language.

•The Ohio State University reports that those students who entered with no deficiencies in English and mathematics are more likely to continue into the sophomore year and to exhibit higher grade point averages.

Recognizing that implementation of such a program requires a great deal of cooperation between the high schools and colleges and universities, the Commission stands ready to facilitate the process and to provide assistance where appropriate.

* * * * *

STRATEGY 23. THE COMMISSION ENDORSES THE GOVERNOR'S PROPOSED PACIFIC RIM FELLOWSHIP PROGRAM AND ENCOURAGES THE ACTIVE PARTICIPATION OF BOTH PUBLIC AND INDEPENDENT POSTSECONDARY INSTITUTIONS IN ALASKA TO FOSTER SUCH AN EXCHANGE OF STUDENTS BETWEEN PACIFIC RIM COUNTRIES.

An exchange program between students of Pacific Rim countries and Alaska residents would promote cultural and economic relationships and enhance trade in areas of mutual interest to Alaska and the Pacific Rim. Postsecondary institutions should take advantage of this opportunity to encourage Alaska students to study for one to two years around the Pacific Rim and, in return, to attract a high quality, culturally-diverse student body.

To achieve the maximum benefits from such an exchange, Alaska institutions should seek to use foreign students as an educational resource. Participating students could be required by receiving institutions to provide an educational service to the host community. Such a service could include: assisting the college or university with orientation programs for other foreign students; cultural seminars for Alaska students and faculty; advising Alaska businesses with import/export interests; advising high school students; and assisting local secondary and postsecondary schools with development of curriculum regarding foreign countries and cultures.

Alaska institutions should actively recruit sponsorships from the private sector to assist exchange students in meeting educational costs associated with their plan of study, and thus reduce the cost to the general fund for these fellowships. Any donations from private industry, for example, could help promote long-term economic development and trade. Institutions could also play an active role in promoting the concept of Pacific Rim exchanges at foreign institutions to encourage the acceptance of Alaska students and thus foster inter-institutional cooperative agreements.

There are currently no government sources available for foreign students in need of financial assistance. In an era of declining budgets, however, it will be up to our institutions to ensure that Alaska benefits from expending funds for Pacific Rim exchanges by turning individual student experiences into educational resources for the state.

A copy of the Pacific Rim Fellowship legislation in its most recent form is included in Appendix H in Volume II.

* * * * *

STRATEGY 24. THE WICHE STUDENT EXCHANGE PROGRAM, THE WICHE REGIONAL GRADUATE EDUCATION PROGRAM AND THE WAMI MEDICAL EDUCATION PROGRAM SHOULD BE CONTINUED AND EXPANDED WHERE APPROPRIATE TO IMPROVE ACCESS TO GRADUATE AND PROFESSIONAL TRAINING OPPORTUNITIES.

The Western Interstate Commission for Higher Education (WICHE) has long been seen as a mechanism by which to provide access to more learning opportunities for Alaskans in fields of study not available in the State. WICHE promotes the interstate sharing of higher education resources to help meet the manpower needs of the 13 western states. The WICHE Student Exchange Program gives Alaska residents access to 16 fields of professional and graduate education not available in Alaska. Alaska students receive preferential admissions consideration at WICHE-participating schools in 12 states and pay reduced tuition. The reduced tuition is either the in-state rate at public institutions, or about one-third the usual cost at private schools. Students receive no direct payment. Instead, the State of Alaska pays the WICHE schools a fee for each student which covers the non-resident portion of the tuition and a portion of the institution's operating costs. This support fee is established annually by WICHE Commissioners from the western states. The amount of the fee varies considerably depending upon the field of study. A list of support fees for each field is found in Appendix H in Volume II.

In recommending careful consideration of the development of new in-state graduate programs, the Commission simultaneously encourages Alaska's higher education institutions to look to existing eligible WICHE programs as a means of determining what graduate fields are most needed by the state. In addition, appropriate undergraduate programs in WICHE-related fields should be strengthened at in-state schools to ensure that Alaskans are well-prepared to enter advanced professional training offered out-of-state.

Alaskan institutions are encouraged to expand their participation in the WICHE Regional Graduate Education Program which makes graduate programs unique to the region available at in-state rates to other WICHE states' students. This WICHE regional exchange program provides lower cost access to fields of study of importance to the region and the State. Alaska realizes the benefit when its own students (and out-of-state students as well) return to Alaska to practice their professions. Currently, the University of Alaska, Fairbanks and the University of Alaska, Juneau offer programs in cold region studies and fisheries which are available at in-state tuition rates to students from other western states. By making additional graduate offerings available, more out-of-state students will be attracted to Alaska's programs, and the state will benefit from new talents and educational resources.

The WAMI Program provides medical education for students in Washington, Alaska, Montana and Idaho. Under the Alaska portion of the program, Alaska residents accepted at the University of Washington, School of

Medicine register concurrently at the University of Alaska and the University of Washington. Fifteen places in each class are reserved for Alaska residents and the first year of medical training is on the Fairbanks campus. Students attend the second and third years in Seattle. Their remaining medical school training is conducted either in Seattle or at clinical units in WAMI states. During the entire program, Alaska residents pay resident tuition.

The WAMI program is an excellent opportunity for Alaska residents and a resource for the state. The recent addition of five places for Alaska citizens by the legislature recognized the important contribution the program has made to Alaska's health community.

* * * * *

STRATEGY 25. THE ALASKA STUDENT LOAN PROGRAM IS AN EFFECTIVE MEANS TO ELIMINATE FINANCIAL BARRIERS TO POSTSECONDARY EDUCATIONAL AND TRAINING OPPORTUNITIES FOR ALASKANS. IT SHOULD CONTINUE TO PROVIDE ALASKANS OPEN CHOICE AND OPEN ACCESS TO THESE OPPORTUNITIES.

The Alaska Student Loan Program is one of the most successful programs offered by the State of Alaska. Its purpose is to provide low-interest loans to Alaskans wishing to pursue education and training at a postsecondary level. The program has grown from serving just over 1,000 Alaskans in 1971-72, to the current 1984-85 level of serving nearly 17,000 Alaskans. The true impact of this program is considerable.

Financial assistance benefits not only the individual, but also the individual's family. Moreover, expanded educational opportunities are afforded the citizens of the State resulting in a more highly trained and educated citizenry. Alaska has chosen to invest in the education of its people. Through these loans, which are in large part repayable to the State, Alaska has committed itself to providing opportunities and access to all those residents seeking postsecondary education.

The Commission believes the State of Alaska can make no better commitment of resources than investing in the education of its citizens. Direct support of Alaska's public elementary, secondary, and postsecondary school systems is vital to the State's continued growth and development. It is in the best interest of the state to provide access to these educational resources for the citizens of Alaska.

The best method of assuring access and opportunity is through the direct provision of educational services, but this is not always practical or possible, particularly at the postsecondary level. Therefore, the most effective and efficient method in attaining these goals of access and opportunity is through a system of low interest loans which allow the students to choose the educational setting most appropriate for their particular needs. The Alaska Student Loan Program is such a system.

So that the legislature, the governor's office, and the citizens of Alaska are fully cognizant of the impact of the loan program, the Commission will continue to research and explore those issues which

relate to the effectiveness and efficiency of the program. The issues include the return rate of loan recipients, the students' fields of study, the efficacy of loan forgiveness and the fiscal impact of differing interest rates.

The Commission endorses and recommends the continuation and maximum support of the Alaska Student Loan Program. The freedom of choice and educational opportunity available to Alaskans under this program should be vigorously supported and preserved.

* * * * *

REFERENCES

The Admissions Strategist, College Entrance Examination Board, New York, 1984.

Alaska Taxable, Alaska Department of Community and Regional Affairs, Volume XXIV, January 1985.

Astin, Alexander W., "Excellence and Equity: Achievable Goals for American Education," National Forum: The Phi Kappa Phi Journal, Vol. LXIV, No. 2, Spring 1984, pp. 24-29.

Astin, Alexander, and Peter Ewell, "The Value-Added Debate . . . Continued," AAHE Bulletin, Volume 37, Number 8, April 1985, pp. 11-13.

Attrition and Retention of First-Time Full-Time Students in Two-Year and Baccalaureate Degree Programs, Class of 1974, Office of Institutional Research Report No. 9-76, State University of New York, May 1976.

Balz, Frank J., Sources of State Support for Independent Higher Education, 1982-83, National Institute of Independent Colleges and Universities, Washington, D.C., 1983.

Bennett, William J., To Reclaim A Legacy, 1982-83, A Report on the Humanities in Higher Education, November 1984.

Benson, Charles S., Education Finance in the Coming Decade, Phi Delta Kappa Educational Foundation, Indiana, 1975.

Black, William C., "Financing Community Colleges," Business Office, October 1984, pp. 27-30.

Bogen, Judith R., "Retention Update, Spring 1981," College and University, Volume 57, Number 3, Spring 1982, pp. 289-292.

Bowen, Howard R., The Costs of Higher Education, Jossey-Bass Publishers, San Francisco, 1980.

Bowen, Howard R. (ed.), Evaluating Institutions for Accountability, Jossey-Bass Publishers, San Francisco, 1974.

Bradberry, Bruce M., "Administering Innovative Academic Credit," College and University, Volume 57, Number 4, Summer 1982, pp. 371-405.

Breneman, David W., and Susan C. Nelson, Financing Community Colleges: An Economic Perspective, The Brookings Institution, Washington, D.C., 1981.

Breneman, David W., et al. (eds.), Public Policy and Private Higher Education, The Brookings Institution, Washington, D.C., 1978.

Brinkman, Paul T., "Factors Affecting Instructional Costs at Major Research Universities," The Journal of Higher Education, Volume 52, Number 3, May/June 1984, pp. 265-279.

Claxton, Charles S., and Yvonne Ralston, Learning Styles: Their Impact on Teaching and Administration, AAHE-ERIC/Higher Education Research Report No. 10, Washington, D.C., 1978.

Creative Financing for Higher Education Facilities and Equipment, State Higher Education Executive Officers, Denver, 1985.

Cross, K. Patricia, Adult Learning: State Policies and Institutional Practices, ASHE-ERIC Higher Education Research Report No. 1, Washington, D.C., 1984.

Dallam, Jerald W., et al., "Persistence at the Regents' University of Iowa: A Summary of Four Studies Covering Twenty Years," College and University, Volume 60, Number 1, Fall 1984; pp. 5-20.

A Delphi Forecast of Alaska's Development: The Year 2000 & Beyond, Alaska Department of Commerce and Economic Development, 1983.

Directory of Postsecondary Educational Institutions in Alaska, Alaska Commission on Postsecondary Education, Juneau, 1984.

Effectiveness of Remedial Programs, New Jersey Basic Skills Council, Department of Higher Education, January 18, 1985.

Eldred, Marilou Denbo, and Catherine Marienau, Adult Baccalaureate Programs, AAHE-ERIC/Higher Education Research Report No. 9, Washington, D.C., 1979.

El-Khawas, Elaine, Campus Trends, 1984, Higher Education Panel Report Number 65, A Survey of the American Council on Education, February 1985.

Eurich, Nell P., Corporate Classrooms, The Learning Business, The Carnegie Foundation for the Advancement of Teaching, Princeton, 1985.

Florida Statewide Course Numbering System: An Overview, Florida Department of Education, Tallahassee, June 1984.

Folger, John K., Catalog of Changes: Incentives for Quality and Management Flexibility in Higher Education, Education Commission of the States, Denver, 1984.

FY86 Operating and Capital Budget Request, University of Alaska, October 19, 1984.

FY87-88 Planning Statement, University of Alaska, Fairbanks, 1985.

Golladay, Mary A., and Rolf M. Wulfsberg, The Condition of Vocational Education, National Center for Education Statistics, Washington, D.C., July 1981.

Halstead, D. Kent, Statewide Planning in Higher Education, U.S. Government Printing Office, Washington, D.C., 1974.

Healey, T.M., "Rural Education Needs Assessment: Issues, Concerns and Recommendations," unpublished report, January 1985.

Hodgkinson, Harold L., "Guess Who's Coming to College," Academe, Volume 69, Number 2, March-April 1983, pp. 13-20.

Hoenack, Stephen A., "Pricing and Efficiency in Higher Education," The Journal of Higher Education, Volume 53, Number 4, July/August 1982, pp. 403-418.

Hoy, John C., and Melvin H. Bernstein (eds.), Financing Higher Education, Auburn House, Boston, 1981.

Hu, Michael, "Determining the Needs and Attitudes of Non-Traditional Students," College and University, Volume 60, Number 3, Spring 1985, pp. 201-209.

In Pursuit of Degrees with Integrity: A Value Added Approach to Undergraduate Assessment, American Association of State Colleges and Universities, Washington, D.C., 1984.

Integrity in the College Curriculum: A Report to the Academic Community, Association of American Colleges, Washington, D.C., February 1985.

Jonson, Richard W., State Policy Issues Affecting Independent Higher Education, National Institute of Independent Colleges and Universities, Washington, D.C., 1980.

Kintzer, Frederick C., and James L. Wattenbarger, The Articulation/Transfer Phenomenon: Patterns and Directions, National Institute of Independent Colleges and Universities, Washington, D.C., 1980.

Lawrence, Judith K., and Kenneth C. Green, A Question of Quality: The Higher Education Ratings Game, AAHE-ERIC/Higher Education Research Report No. 5, Washington, D.C., 1980.

Lenning, Oscar T., The Outcomes Structure: An Overview and Procedures for Applying it in Postsecondary Education Institutions, National Center for Higher Education Management Systems, Boulder, 1977.

Lenning, Oscar T. (ed.), Improving Educational Outcomes, Jossey-Bass Publishers, San Francisco, 1976.

Lehmann, Timothy and Peter J. Ristuben, "Colleges in Partnership: Four Ventures in Successful Program Collaboration," The Journal of Higher Education, Volume 54, Number 4, July/August 1983, pp. 381-398.

Leslie, Larry L., and Heather L. Otto, et al. (eds.), Financing and Budgeting Postsecondary Education in the 1980's, Center for The Study of Higher Education, University of Arizona, Tucson, 1980.

Lewis, Raymond J., and Richard Markwood, Instructional Applications of Information Technologies: A Survey of Higher Education in the West, Western Insterstate Commission for Higher Education, Boulder, July 1985.

Lonabocker, Louise, "Can an Institution Construct a Dropout Profile?" College and University, Volume 58, Number 1, Fall 1982, pp. 76-84.

A Manual for Conducting Student Attrition Studies in Institutions of Postsecondary Education, National Center for Higher Education Management Systems at WICHE, Boulder, 1976.

Martin, William J., Secondary Postsecondary Articulation Processes in Technical Programs: A Variation of the Two-Plus-Two Technical Preparation Concept, National Conference on Technical Education, Charleston, 1985.

McLaughlin, Gerald, et al., "Size and Efficiency," Research in Higher Education, Volume 12, Number 1, 1980, pp. 53-66.

Mercurio, Joseph A., et al., "College Credit Earned in High School: Comparing Student Performance in Project Advance and Advanced Placement," College and University, Volume 59, Number 1, Fall 1983, pp. 74-86.

Mercurio, Joseph A., et al., "College Courses in the High School: A Four-Year Followup of the Syracuse University Project Advance Class of 1977," College and University, Volume 58, Number 1, Fall 1982, pp. 5-18.

Michalak, Jr., Stanley J., and Robert J. Friedrich, "Research Productivity and Teaching Effectiveness at a Small Liberal Arts College," The Journal of Higher Education, Volume 52, Number 6, November/December 1981, pp. 578-597.

Mingle, James R., Measuring the Educational Achievement of Undergraduates: State and National Developments, State Higher Education Executive Officers, Denver, January 1985.

Mondale, Walter, "The Challenges Facing American Education," Academe, Volume 68, Number 5, September-October 1982, pp. 8-12.

Mortimer, Kenneth P., and Michael L. Tierney, The Three "R's" of the Eighties: Reduction, Reallocation and Retrenchment, AAHE-ERIC/Higher Education Report No. 4, Washington, D.C., 1979.

Non-Traditional Self-Study: An Innovative Assessment Model, Northeast Missouri State University, Kirksville, 1984.

Office of Facilities Planning and Construction, University of Alaska Capital Improvement Plan, University of Alaska, Fairbanks, 1985.

Olson, Lawrence, The Public Stake in Independent Higher Education, National Institute of Independent Colleges and Universities, Washington, D.C., 1982.

Pascarelli, Ernest T., and Patrick T. Terenzine, "Predicting Freshman Persistence and Voluntary Dropout Decisions from a Theoretical Model," The Journal of Higher Education, Volume 51, Number 1, January/February 1980, pp. 60-75.

Patterson, Lewis D., Survival through Interdependence, AAHE-ERIC/Higher Education Research Report No. 10, Washington, D.C., 1979.

Phipps, Ronald, "The Baccalaureate Reconsidered," College and University, Volume 57, Number 3, Spring 1982, pp. 299-306.

Planning Assumptions for the University of Alaska, First Edition 1980-86 University of Alaska, Fairbanks, 1980.

Postsecondary Education in Rural Alaska, The Rural Education Task Force, April 1985.

Retention, Progression and Transfer at Maryland Public Four-Year Institutions, Volume I, State Board for Higher Education, Annapolis, April 1982.

Revenue Sources, Quarterly Update, Alaska Department of Revenue, 1985.

Rugg, Edwin A., "Design and Analysis Considerations for Longitudinal Retention and Attrition Studies," College and University, Volume 58, Number 2, Winter 1983, pp. 119-134.

Sartorious, John, "High School Advanced Placement Program Position Paper," unpublished report, Salisbury, 1974.

Sharp, Laure M., and Carol P. Sosdean, "External Degrees, How Well Do They Serve Their Holders?" The Journal of Higher Education, Volume 50, Number 5, September/October 1979, pp. 615-649.

Shulman, Carol Herrnstadt, University Admissions: Dilemmas and Potential, AAHE-ERIC/Higher Education Report No. 5, Washington, D.C., 1977.

Silber, John R., The "Private" Contribution to Public Higher Education, Boston University, Boston, 1975.

Sixty-Nine Good Ideas: Responses to Changing Educational Needs by State Colleges and Universities, American Association of State Colleges and Universities, November 1983.

"State Planning: Will Proprietary Schools be Involved" Career Training, National Association of Trade and Technical Schools, Volume 1, Number 2, Summer 1984.

The States and Private Higher Education: A Report of the Carnegie Council on Policy Studies in Higher Education, Jossey-Bass Publishers, San Francisco, 1977.

Statewide Budget Office, University of Alaska FY86 Operating and Capital Budget Request, University of Alaska, Fairbanks, 1984.

Statewide Office of Institutional Planning, Statistical Summary, University of Alaska, Fairbanks, 1985.

Stauffer, Thomas M. (ed.), Quality: Higher Education's Principal Challenge, American Council on Education, Washington, D.C., 1981.

Student Financial Aid Programs, Annual Report, 1983-84, Alaska Commission on Postsecondary Education, Juneau, 1985.

Summer Sessions Associations' Joint Statistical Report, 1983, Association of University Summer Sessions, et al., 1983.

Survey of 1983-84 Alaska Student Loan Recipients, Alaska Commission on Postsecondary Education, Juneau, March 1984.

Thresher, B. Alden, College Admissions and the Public Interest, College Entrance Examination Board, New York, 1966.

Tinto, Vincent, "Limits of Theory and Practice in Student Attrition," The Journal of Higher Education, Volume 53, Number 6, November/December 1982, pp. 687-700.

Vocational Improvement Practices: The VIP Program, State of Connecticut Board of Education, 1983.

Vermilye, Dyckman W. (ed.), Individualizing the System, Jossey-Bass Publishers, San Francisco, 1976.

Vermilye, Dyckman W. (ed.), Relating Work and Issues, Jossey-Bass Publishers, San Francisco, 1977.

West, Cameron, and James Olliver, "Private Colleges and Universities: A Sound Investment for the States," Survey of Business, July/August 1975, pp. 22-25.

Wilson, Robert A. (ed.), Survival in the 1980's: Quality, Mission, and Financing Options, Center for the Study of Higher Education, University of Arizona, Tucson, 1983.

Young, Rodney, "Seventeen Year Graduation Study of 1963 Freshman at the University of New Mexico," College and University, Volume 57, Number 3, Spring 1982, pp. 279-288.

ERIC CLEARINGHOUSE
FOR JUNIOR COLLEGES

MAR 14 1986